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ABSTRACT

The final report is presented for an exemplary program in vocational cooperative education for community colleges developed through a three-year consortium effort of five California community colleges. This national demonstration model shows that community college cooperative education (Classroom study and off-campus, paid work experience) is an effective solution to many problems of student motivation, educational relevance, scholastic achievement, and retention in college, and helps to bridge the gap between school and employment. Among the findings were the following: (1) retention is improved by a factor of more than two to one; (2) academic standing is maintained or improved; (3) educationally disadvantaged students show improved progress; (4) employers are highly receptive after effective demonstration and promotion; (5) cost-effectiveness is being demonstrated as highly productive for the funds invested. Progress toward each of six objectives is described, and reports of various segments of innovation within the project are provided through discussion of 20 progress indicators, including enrollments, bilingual programs, new careers for women, evaluations, and employer reactions. (For related documents, see ED 058 880 and ED 068 092.) (KM)

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FINAL REPORT

Project No. 0-361-0069
Contract No. OEC-0-71-0527 (361)

Period Covered July 1, 1970 through September 1, 1973

COMMUNITY COLLEGE VOCATIONAL COOPERATIVE EDUCATION

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

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LOS ANGELES

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INFORMATION

OVERVIEW
1970 to 1973

An exemplary program in vocational cooperative education for community colleges has been developed through an intensive three-year consortium effort of five California community colleges. Financed by the U. S. Office of Education, with a grant under Part D of the Vocational Education Act, the project demonstrates that community college cooperative education--a plan for career preparation through classroom study and off-campus, paid work experience--is an effective solution to many problems of student motivation, educational relevance, scholastic attainment, and retention in college. Assuredly, it is among the better methods of bridging the gap between school and employment.

The five colleges of the project are in the San Francisco Bay Area and the Los Angeles-San Diego Area, two urban crossroads of international activity for business, communications, transportation, education and government. The participating colleges include Cañada College, College of San Mateo, and Skyline College of the San Mateo Community College District in Northern California; Orange Coast and Golden West Colleges of the Coast Community College District in Southern California.

After three years of developing and demonstrating three methods--alternate semester, parallel and extended day--for training, re-training and upgrading students, the results have been better than original expectations.

Nearly 5,000 students per semester enroll in cooperative education work experience--67% more than the best expectation of 3,000 planned for the third year of operation.

Student retention rates are increased substantially through cooperative education.

Student reports consistently emphasize improved learning opportunities and better understanding of concepts that result from combining college classroom studies with on-the-job paid work experience in chosen career fields.

Academic standing is maintained, income earned is generally excellent, special student needs are being met, employers are receptive to the concept, and cost-effectiveness is being demonstrated.

Over 3,200 employers are involved in community college education through cooperative work experience, effectively illustrating the "laboratories of the community" concept of learning on-the-job.

Five different approaches to staffing and recruiting emerged during the three-year test period as the result of unique community needs and resources of each college in the consortium.

Nation-wide attention to the exemplary model has been evident from the hundreds of outside inquiries, calls and visits experienced by the five colleges.

Co-op students generally worked about 30 hours per week earning an average of $2.94 per hour during 42 weeks for a total combined earnings for 1972-73 in excess of sixteen million dollars. Cooperative education has proved to be the largest financial support program existing at the colleges.

Significant impact has been made in the recruitment and retention of educationally disadvantaged students through cooperative education.

Interaction of community college cooperative education students with elementary and secondary school students has been developed through means such as the environmental education program led by professional naturalists, with co-op students serving as teacher assistants for elementary school children in the San Mateo County outdoor environmental education camp.

Hundreds of co-op students working in regular classrooms as teacher assistants in pre-school, elementary, junior high and high school have served as "older brother-sister" models of how to gain a better college education through cooperative work experience.

A PROBLEM AND ITS SOLUTION

The primary purpose of Community College Vocational Cooperative Education has been to establish a substantial national demonstration model--to implement a program, test materials, and develop new procedures. Toward this goal, the consortium placed its first major emphasis on the development of interest and support from leaders in business and industry. The plan was to gain full support for new and improved patterns of cooperative education. Program objectives were designed to promote effective interaction between consortium colleges and the business community through student participation in cooperative work experience.

Expert opinion suggests that in the not-too-distant future, probably by the late 1970s, as many as 25% of community college students will be enrolled in cooperative education programs. There is, at this time therefore, a critical need to establish and effectively evaluate procedures for using this innovative learning process. Current trends in education are aimed toward providing relevant educational experiences for students, emphasizing direct participation in community activities, and responding to the need for increasingly specialized career education opportunities. These trends all point to large-scale implementation of cooperative education. Among top-priority career areas where there are bridges to build between education and employment are technical, business, and para-professional careers--areas where community colleges using cooperative education can lead the way in new development.

The co-op plan is proving to be a valuable cost-effective vehicle for using "laboratories of the community" to the best advantage of the student, the employers and the college. The combination of high-quality classroom instruction with related field experience in the community, provides young people and adults with expanded educational opportunities leading directly to productive employment in business, industry, and civic agencies.

RESEARCH FINDINGS:
EFFECTIVENESS OF VOCATIONAL COOPERATIVE EDUCATION IN COMMUNITY COLLEGES

Analysis of data in sixteen areas of study indicates that the following results occurred as community college vocational cooperative education has been developed and demonstrated in the five college consortium.

1. Retention of students is improved by a factor of more than two to one.

Evidence resulting from three years of program development indicates that overall retention rates in regular courses of the five college consortium are 65% to 70%; while retention rates in co-op range from 75% to 95%. The median rate of class withdrawal is 32% for all students, as compared to 15% for co-op students. In other words, for every two students who leave traditional programs in community college before completion, only one cooperative education student leaves before completion.

Data from five colleges provides further evidence that the retention rates of evening college students are improved even more than day students. One college, for example, reported that the class withdrawal rate for all evening students was 35%, compared to only 5% for evening college cooperative education students.

Another college report shows a retention percentage over the period of one semester for the entire student population of 87%--a dropout rate of 13%--as compared to 95% (5% dropout) for cooperative education work experience students. This report was provided from data processing computer information comparing fourth week and final enrollments.

A third consortium college, reporting over a longer span of time, indicated a 33% to 40% withdrawal rate for overall day and evening courses, as compared with 13% withdrawal rate in cooperative work experience--a retention improvement factor of three to one.

Further summarizing retention rates a fourth college indicated 91% retention for cooperative work experience enrollments, as compared to 70.1% for all regular courses over the same period of time. This ratio, 9 to 30, is greater than three to one.

It is evident, therefore, as indicated by three years of research and development in five colleges, that retention --a significant problem for community colleges--can be improved substantially by the involvement of students in cooperative education.

2. Academic standing of students is maintained or improved while enrolled in cooperative education in community colleges.

> Considering overall grade-point distributions, it is evident that cooperative education work experience employment does not detract from academic standing, and more often than not it brings about improvement of grades through increased motivation and greater opportunity for learning.

Evidence is provided by the following statements from consortium college reports:

> "Cumulative Grade Point Averages for cooperative education program students (N - 863) is 2.57; total student population exclusive of cooperative education students is 2.35 for fall semester 1972-73."

> "13 (40%) of the 33 scholarship winners at Cañada College for 1973-74 completed at least one semester of cooperative education."

> "Data on Grade Point Averages (GPA) of 950 students in fall and spring semesters indicates that cooperative education employment does not detract from academic standing."

	Co-op	All Students
Semester GPA (Median)	2.28	2.00
Semester GPA (Mean)	2.59	2.66
Semester GPA (Mean, 12-15 units)	2.71	2.66

> "Comparing letter grades in ten divisions, day and evening college, between students enrolled in cooperative work experience education (N - 1,250) and students not enrolled in co-op, it is apparent that co-op students maintain grade averages as high or higher than other students. Grades do not go down as the result of working in cooperative education assignments."

> "Percentage of general student population (not including co-op) on Dean's List is 37%;
> Percentage of co-op students on Dean's List for high academic performance is 47%."

Summarizing, it is quite apparent that learning through work experience in a coordinated program of cooperative education does not cause grades to drop. Contrary to often-expressed concern about distraction from learning while working during college, there is substantial evidence to show that the opposite is true if the educational program is arranged in the manner of cooperative education.

3. Total income earned by students in one year as the result of community college cooperative education paid work experience in the Five College Consortium during 1972-73 was in excess of $16,000,000.

> Of 4,797 students in Co-op, 4,350 earned an average of $2.94 per hour from their employers while working an average of 30 hours per week for 42 weeks. The salaries ranged from a low of $1.50 per hour--many from $115 to $150 per week--to a high of more than $1,000 per month.
>
> In unusual circumstances, as when a small percentage of students began as volunteer interns in public service careers during the first period of employment, it is apparent that later many were placed on the employer's payroll when competence was demonstrated. Agencies have been able to establish budgets for aides and trainees as the result of high-quality performance on the job by cooperative education students.
>
> Reports indicate many variations in salary:
>
> "Volunteers--certainly the lowest end of the pay scale--are gaining valuable experience that often leads to paying jobs."
>
> "$2.00 per hour is our minimum. Highest pay is for alternate semester jobs in building elevator maintenance and installation for $272 per week--$1,088 per month while in training with a major nationwide employer."
>
> "Weighted average hourly earnings for the better co-op employment stations leading to Associate Degree responsibility levels is $3.43 per hour or $811 per month on full salary."
>
> "Based upon a mean of $2.50 per hour students at this college earned $1,207,125 this year, while at the same time they gained new learning experience which is of greater value than the financial income."

Significantly, when students identify their greatest interest in cooperative education, it is most often reported in surveys as earning power. This is true in spite of educational planning which proposes that increased knowledge and advancement toward educational goals should be the most important objectives.

Success of the program in terms of developing earning power has proven to be far beyond any original expectations of the project design. The cooperative education program in each of the five colleges provides more student financial assistance than any other resource.

4. Educationally Disadvantaged students show improved progress.

Educationally disadvantaged students, who in traditional kinds of programs have tended to be early dropouts because of educational deficiencies or financial limitations, are achieving success in vocational cooperative education in about the same percentages as other students. Reports include factors of retention, academic stability, and earnings. This level of progress is well above early expectations.

5. Employers are highly-receptive to community college cooperative education after a period of effective demonstration and promotion.

Employer positive response to the program is indicated by the fact that about 50% of "good prospect" employers, screened from response letters to development literature, actually become employers of co-operative education students. A total of 3,200 business, industry and community agencies have employed the 4,772 students enrolled in community college cooperative education during the 1972-73 school year in the five college consortium.

Employers are becoming aware of the fact that community colleges are the largest local labor pool of young, talented employees with high potential for advancement to technical and management positions. The co-op plan is the answer to many of their recruiting and screening problems.

Students, as well as employers, benefit from the effectiveness of cooperative education to open wide new areas of employment traditionally not available to beginning workers. Recruitment, as well as options for continuing in school and on the job, are mutually beneficial.

College Report, 750 Employers:

"A large company reporting through personnel representatives stated that the concept of cooperative work experience education has been introduced into all of their employee's bargaining sessions and has been received with enthusiasm. Many employers see community college work experience credit as an incentive for full-time employees to continue upgrading and re-training activities for today's employment needs."

6. Cost-effectiveness of community college cooperative education is being demonstrated as highly productive for the funds invested.

   Man-hours of co-op coordination including job development, counseling, evaluation and on-the-job consultation are 5.87 man-hours per student per semester.

   Cost of vocational cooperative education (other than on-campus classroom instruction) including 3 semester hours credit per student, with associated teacher coordinator activities, job development, counseling and on-the-job consultation and evaluation is $52.17 per student per semester.

      These calculations are based upon salaries of $15,650 for instructor-coordinators working 8 hours per day for 220 days per year, providing full coordination services for 150 students per semester.

   Since vocational cooperative education may account for as much as 25% of the total unit credit of a vocational program in community college, it is quite apparent that a substantial negative-excess-cost-factor can be applied to programs of this type. Through cooperative education the total cost of college per student is reduced.

7. Improved educational opportunities are documented in terms of student measurable learning objectives and new on-the-job training programs.

   Student measurable learning objectives identified on-the-job at the beginning of each semester have resulted in greater progress toward new learning opportunities as perceived by both students and their employers.

   Measurable learning objectives for cooperative work experience are classified in terms of (1) skill development, (2) increased knowledge and (3) improvements in inter-personal relationships, including attitudes and motivation. These categories are derived from corresponding basic taxonomies of learning, identified in professional literature on learning processes as (a) psycho-motor, (b) cognitive and (c) affective domains.

   Examples of Measurable Learning Objectives:

      "During the spring semester of 1973 my proficiency in the use of the 457 Ajax Milling Machine will improve to the point where I can set up the machine and from blueprints produce prototype machined castings in a time-span equivalent to twice that of a journeyman machinist; but within the required tolerances, with the judgment of James Smith, Industrial Design Supervisor, as the evaluator of performance."

"Within a four week period at the beginning of the fall quarter, I will prepare a plan for improving marketing procedures in EOM sales which will be presented in staff meetings, revised in accord with management recommendations, and if acceptable tested as a sales procedure during the semester. Evaluation will be through measurement of the sales effectiveness as reported by supervisory personnel."

"During my second semester of cooperative work experience I will emphasize the improvement of skills in interpersonal relationships, including (1) reduction in errors of communication occurring in telephoned orders; (2) improvement of voice quality through concentration and speaking more slowly; and (3) practicing the habit of friendliness while working with others on the job. Measurement of improvement will be by rating scale reported by other workers and by my supervisor, Dr. Janice Johnson."

Industrial and business training programs for on-the-job advancement toward mid-management and senior technician careers open a second new area of cooperative education interchange between employers and community colleges. Examples of on-the-job formal training programs are found in service industries, wholesale and retail trade, transportation, manufacturing and civil service.

Before cooperative education was adopted as an on-going part of company training programs, relatively few students were able to take advantage of these in-house learning activities. Now, however, it is becoming standard procedure to involve co-op students in seminars and programmed learning which leads to advancement on the job.

Employers and students are seeing new ways in which the cooperative plan can be used to mutual advantage to develop skilled employees. Mid-management and senior technician jobs have been obtained through the mutual efforts of employers, coordinators and students.

8. Firm linkage between educational preparation and permanent employment upon graduation results from cooperative education.

Although three years is not sufficient for complete evaluation, there is much evidence to indicate that a true linkage is being established between educational preparation and employment doing the kind of work for which training has been undertaken. Employment in direct relationship to training has been a major source of concern for all types of training programs. Co-op, because of early direct involvement between student and employer, apparently provides an effective solution.

"To use the airlines as but one example, it was reported this year that as a result of cooperative education George Johnson (WA) will get a sought-after job as a 'maintenance-specialist-electronics area'. Fred Smith (Pan Am) will get special exposure to the budgeting process as a prelude to making another step towards management. Alan Benson (VA) found a job in the fiberglass repair area after studying it only last semester as part of his cooperative education assignment, and Ray Thompson (TWA) has made part of several management project teams to give him the exposure required for management positions."

"As cooperative education becomes an integral part of each career program here at Skyline the link between education and employment is being forged. Cooperative education is either required or strongly recommended as an elective in all of the career programs offered."

9. Training, upgrading and re-training are important features of the demonstration for those with lower-level jobs who wish to improve their positions as well as those who are beginning work for the first time.

Placement on the first job and advancement to higher levels of competence are two patterns of co-op employment. The parallel plan enrolling about 49% of the 4,797 students, along with the extended day new career plan enrolling about 45%, are the two most used methods of co-op interaction with employers. Alternate semester arrangements for 6% are increasingly in demand and the trend is growing.

Paid employment and college coordination are the two universal factors in cooperative education.

Enthusiasm develops as students get involved in on-the-job activities. Increasingly there are requests for information on transfer to upper division colleges and universities by those whose sights have been raised through the cooperative education process. Upper division institutions are responding by developing opportunities for co-op transfer students who have been "turned on" to further education.

10. Nearly 100% of students are able to hold their co-op jobs after placement.

Although many students must learn to cope with problems on the job there is less than 1% failure rate. Coordinators assist in job changes and in obtaining better jobs for qualified students. Re-assignment to other jobs is sometimes used if unusual problems are encountered. Coordinators and on-the-job supervisors have proven to be highly effective in helping co-op students to succeed.

The trend in each college is to combine student placement office activities with cooperative education work experience placement. For example, Karl Strandburg, Director of the Golden West College program reports:

"We have integrated the Placement Office with Co-op Work Experience. This has proven to be a very positive organizational change. The student identifies one function as being concerned with off-campus jobs rather than two; it has also expedited the communication process for the employer. He now sees the Co-op Work Experience office as being that contact point for all concerns having to do with job experience and placement. The integration of these two activities facilitates the process of helping the student find a part-time or full-time job and, when appropriate, getting them enrolled for co-op education. We are hoping to expand upon this integration to include something similar in the Career Development Center. We are presently conducting some sensing sessions with instructors and counselors to determine the best method for implementing this phase of our program. Hopefully, the design will involve both counselors and instructors in an active way."

11. Cooperative education job development can be accomplished either by full-time developers or by assignment as part of the task of regular co-op coordinators.

At this stage of development it requires about 3 man-hours to develop one co-op job. There is evidence to indicate that a dual approach should be taken for this function. Much of job development belongs with the regular coordination assignment, particularly for work station development within organizations already employing co-op students.

"One thing I have noted is that we always have more jobs than we can fill and at the same time more students than we can place. As in all personnel work, it is difficult to make the job and the student fit together. Expectations of students and employers can usually be met, but there are times when neither are completely happy. As the program grows, there is a constant improvement in the quality of placements and experience opportunities."

"It must be mentioned that developing student interest in various jobs is equally important. Nothing is more frustrating to us or employers than to develop an opening and not be able to fill it. We try to overcome the problem via recruiting entering students, conducting job seminars, communicating with teachers in various career programs and publicizing job openings in student publications."

12. Employer participation is developed using at least five approaches:

    a. One-by-one meetings with supervisory personnel;
    b. Large group meetings with many employers;
    c. Large companies and small businesses approached through associations;
    d. Band-wagon effect in job development as companies become aware of program potential;
    e. Job development as a regular function of cooperative coordination activities.

"Each semester 7.5 semester hours of certificated time was allocated for the purpose of job development. In the fall, concentration was made in the area of student recruitment, technician positions, business/DP positions and public service. In the spring, development centered on technician, aeronautics, and government positions. The goal has been to establish 'ideal' work stations directly related to every occupational area."

"Employers are anxious to participate in a planned Career Day to supply materials for a career center, and to list their job openings with our placement center. Over 634 employers listed 2,035 jobs at the placement center between September and April, a substantial increase over last year when the comparable figures were 465 employers and 1,641 jobs."

"Most of the major employers in cooperative education have established training programs into which they integrate the cooperative education concept."

13. Returning veterans are finding cooperative education particularly helpful.

There is a tendency for veterans to turn to community colleges rather than other institutions for continuing education. They find the cooperative education approach attractive. Three coordinators report that 30% of their cooperative programs are made up of returning veterans.

Employers are satisfied with employees trained through cooperative education procedures. Evidence of this is the fact that employer overall ranking of cooperative students is 7.4 on a 10-point scale. This is the category identified as "highly satisfactory". Most co-op students rank well above 5.0 the "average". Only 5% rated as "below average".

14. Career training options for students have doubled, it is estimated, with no increase in the numbers of college programs.

Coordinators of the five college programs have estimated that the range of actual career training options which have emerged through cooperative education is twice those listed in their college catalogs. Students are able to move into unique, unusual job preparation opportunities through combinations of community college instruction with work experience in new areas.

Unique opportunities are being provided as, for example, special cooperative opportunities for hearing-impaired students, Learning Center support for co-op disadvantaged students, revision of many law enforcement training programs in northern and southern California to take advantage of community college cooperative education; public service career opportunities; and work stations in places such as Los Angeles, Sacramento, and Washington D. C. on the alternate plan.

15. The consortium approach to development of innovation in five colleges provides program stimulation between colleges capitalizing on individual breakthroughs.

Five unique approaches are developing. Two geographical areas in northern and southern California with different kinds of facilities for students are being tested. Unique faculty strengths are available to students including over 200 coordinators from 40 college divisions. 3,200 employers are assisting in the education of nearly 5,000 community college students each semester.

"We have found it important to discuss our procedures and goals with the other co-op coordinators to test ideas and further refine them. Consortium participants are setting the pace in community college cooperative education and they offer the best source and provide the easiest access for sharing ideas."

"Consortium planning with employers has been beneficial."

"The opportunity for sharing ideas is of significant value. Not having to invent every new technique and test every procedure is a luxury that makes the total program far more effective."

16. Cooperative education programs will continue in each of the five consortium colleges through regular funding

Continuation of cooperative education programs as developed by the five colleges is assured. The original consortium design called for start-up costs, research, and preliminary program implementation to be undertaken by means of outside assistance. Over the three year development period, State and local replacement funding has increased, as planned, so that ADA funding provides the necessary resources to maintain the program. The original design called for continuation through state apportionment and local tax effort, with full-scale programs operating at the end of three years. This changeover plan has been accomplished successfully.

California State legislation developed in 1969 and 1970, at the beginning of the Vocational Cooperative Education project, provides the basis for state ADA (average-daily-attendance) support for community college co-op programs. This legislative effort, created as a result of expanded activities in cooperative education, is the means by which California community colleges are moving forward with co-op work experience programs.

Effectiveness and efficiency have been demonstrated to the satisfaction of decision-makers who determine educational priorities. Student participants in cooperative work experience for the most part remain in college and they tend to increase their level of enrollment in other courses. These and other demonstrated effects assure co-op a place in the curriculum.

As the result of widespread support for the concept of cooperative education, each college has budgeted funds for continuation and expansion. As with other innovations, when testing is complete and the program proves to be of exemplary quality, then continuation efforts become a matter of local priority. Strong faculty and administration support, in addition to student and community interest, has assured continuation of consortium developed designs for community college cooperative education.

Judie Hemphill,
Dental Assistant

Roy Geul, Banking Trainee

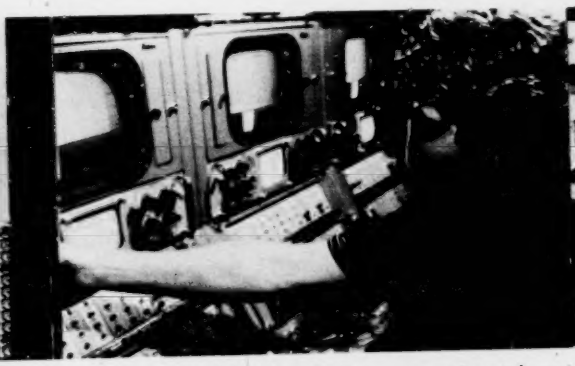
Barry Goals, Teachers Aide

Dan McKerran, Police Science

Steve Clark, Lion Country Safari

Gary Trembly, Teachers Aide

Manuel Carrillo, Otis Elevator



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TASKS TO BE ACCOMPLISHED
WITHIN THE SCOPE OF THIS
EXEMPLARY PROGRAM: 1970-1973

Student Development

1. Provide effective counseling and placement of 1,000 students during the first year of operation with corresponding expansion in following years;
2. Measure the performance of students on the job;
3. Increase the effectiveness of classroom instruction by relating it more closely to practical application in the community;
4. Increase the ability of students to cope with an adult environment;
5. Identify and strengthen the ability of students to deal with interpersonal relations;
6. Assist students in adjusting to productivity and creativity in the day-to-day world of work;
7. Help students to learn to earn money and to budget expenses;
8. Provide an opportunity to choose a career direction in an environment where information and direction by professional counselors is available;
9. Gain the use of the "laboratories of industry" and to have access to sophisticated equipment that would not be available on the community college campus;
10. Identify future employment opportunities;
11. Make contact with specific employers for work experience;
12. Learn to know and understand the community from a different perspective than is possible from classroom experience;
13. Develop student initiative, motivation, insight and responsibility through periods of field experience combined with classroom instruction.

Program Development

1. Develop plans and procedures for implementing efficiently and effectively a vocational cooperative education program for transfer to other schools;
2. Develop procedures [illegible]easuring student progress;
3. Develop methods of s[illegible]al assistance to disadvantaged youth;
4. Identify major employment areas and prepare students for employment in these areas;
5. Document student performance and skill development in personal interrelationships which may result from the work-school educational plan;
6. Increase the effectiveness of counseling procedures;
7. Increase the effectiveness of job development procedures;
8. Obtain data which will be of assistance in developing more effective programs in vocational cooperative education;
9. Improve the educational programs of the community college by providing more extensive feedback from the community through student employment;
10. Develop effective means for identifying the educational needs of the community directly through student and employer response rather than planning from reviews of abstract projections;
11. Develop "open-ended" vocational cooperative education plans which effectively encourage students toward realistic career goals with short-range and long-range education options.

PROGRESS TOWARD OBJECTIVES 1970-1973

The original program development design stated six basic objectives as being attainable within the proposed limits of time and financial support. Substantial forward progress toward achieving these objectives has been demonstrated by the consortium. Highlights include: (a) favorable community college student response to cooperative education beyond the most optimistic original expectations; (b) development of cost-effective procedures for implementing and maintaining cooperative programs; (c) expansion of efforts toward K-14 career education articulation; (d) development of procedures for student learning achievement through measurable learning objectives for on-the-job experience; (e) expansion of developmental efforts to provide special services to disadvantaged students, veterans, physically handicapped and others; (f) expansion of efforts toward re-training and upgrading unemployed and under-employed workers through cooperative education; (g) development of in-service preparation for co-op coordinators; (h) emphasis on new careers for women; and (i) transfer of co-op procedures and experience to other institutions through written information as well as by visiting educator interaction with five college faculties.

Objective 1. <u>Establish a substantial national demonstration model for community college vocational cooperative education.</u>

Progress: To test a concept and demonstrate its implementation in large organizations, it is essential to maintain development until the principle of "critical mass" is achieved. As in the case of this demonstration project, it is now assured that within a three-year period substantial impact can be made on five institutions in a consortium effort. Observations include: (1) the level of student interest in co-op continues to grow; (2) a substantial positive change in attitude among faculty members can be developed, including the process of in-service growth for coordination with business and industry; (3) improvements in procedure are continuous during the period of development; and (4) the level of transferability, through interaction of visitors with consortium faculty and written requests for information, continues to grow throughout the period of development.

PROGRESS TOWARD OBJECTIVES: 1970-1973

Objective 2. Demonstrate the effectiveness of alternate semester, parallel, and extended-day plans for community college vocational studies which include paid work experience in business, industry, and civic agencies of the community.

Progress: At this point there is evidence that the three plans identified as alternate semester, parallel and extended-day will become the procedures used in most community colleges. The terms are being used extensively in the literature on cooperative education and this model is serving as a basic design for others. Business, industry, and civic agencies for the most part see one or more of the plans as suitable for cooperative education student employees in their organizations.

Objective 3. Prove the effectiveness of recruiting, development and coordination procedures planned for a consortium effort of five California community colleges enrolling 1,000 cooperative education students during the first year of operation, with comparable annual increases in numbers during the three years of demonstration.

Progress: Recruiting, development and coordination have been refined substantially throughout the period of project implementation. It is anticipated that procedures which have been tested can be disseminated with assurance that they will be effective. Extensive additional validation is now occurring in other community colleges.

Objective 4. Prove the effectiveness of vocational cooperative education in recruiting and maintaining disadvantaged students who would not otherwise enter community college programs.

Progress: Special developmental efforts have been undertaken on each of the five campuses to provide special coordination, counseling, recruiting and job development for disadvantaged students. On several campuses bi-lingual Mexican-American coordinators are directing special efforts in co-operative education. Three of the colleges have coordinators specifically serving the needs of Black and other ethnic minority students. Articulation services have been developed and tested between high school special programs and community college programs, to assure opportunities for those students who wish to advance to community college cooperative education. Employers have been particularly helpful in assisting with this development since they are under pressure to increase their number of affirmative action employees. Cooperative education serves as a valuable method of recruiting and training for these students and employers.

PROGRESS TOWARD OBJECTIVES: 1970-1973

Objective 5. Demonstrate the effectiveness of vocational cooperative education in solving the technical, business and para-professional manpower recruiting and training problems of business and industry.

Progress: Cooperative vocational education is proving to be an efficient method for employers to use the resources of the community college to gain initial contacts with future employees. Alternate periods of employment, while participating as a student in community college programs, serves as a self-selection "screening in and screening out" process which is to the advantage of both students and employers. Students have access to better jobs than they would be able to locate by themselves. They gain an understanding of the working environment and the demands of the job. At the same time employers are able to observe the future employee in a temporary employment relationship which is not binding on either the student or employer. The period of in-service training is reduced and both gain the benefits of cooperative education.

Objective 6. Demonstrate the effectiveness of television instruction and coordinated instruction systems in providing "outreach" instruction and counseling for off-campus students in cooperative education with particular emphasis on career orientation for elementary and secondary school students.

Progress: Community college television programs have been put on the air to provide career information including the concept of cooperative education for elementary and secondary school students. Secondary school students particularly have been assisting in the preparation of ideas and script for films to be presented at their level. Follow-up studies conducted by Coast District researchers show substantial gains in understanding and interest when these films and videotapes are used with elementary and secondary school groups.

Related and potentially highly-effective activities are underway in development of a county-wide comprehensive elementary-secondary-community college K-14 career education development program with community college cooperative education serving as a coordination component.

PROGRESS INDICATORS

As a means of reporting about various segments of innovation within the five college cooperative education project, on the following pages a sampling is provided showing Progress Indicators. Complexities of operation in a substantial new development such as the consortium makes it difficult to present an all-encompassing condensed version of progress that might be desirable. It is assumed that a sample technique indicating areas of progress will provide an overview that will be of greatest assistance to those who are interested in developing similar programs.

PROGRESS INDICATOR 1

COMMUNITY COLLEGE VOCATIONAL COOPERATIVE EDUCATION ENROLLMENTS IN FIVE COLLEGE CONSORTIUM
Spring Semester, 1973

COAST COLLEGE DISTRICT

Orange Coast College

Technology	459
Business	444
Agriculture & Biol. Science	55
Consumer and Health	87
Physical Education & Recreation	17
Physical Science and Math	11
Fine Arts	49
Social Science	62
Communications & Education	44
Total	1,228

Golden West College

Business	441
Social Science	402
Fine & Applied Arts	30
Technology	248
Math and Science	55
Recreation	31
Communication	19
Total	1,226

Total Enrollments Coast College District: 2,454

SAN MATEO COLLEGE DISTRICT

College of San Mateo

Aeronautics	50
Agriculture	8
Art and Architecture	45
Business	195
Education	248
Fire Science	2
Forestry	4
Engineering	39
Home Economics	27
Journalism	8
Library Science	2
Allied Health	50
Police Science	36
Real Estate	3
Recreation	5
Public Science Careers	64
Science	18
Technology	30
Welding	3
Undecided Majors	144
Total	981

Cañada College

General Cooperative Ed.	201
Education	47
Police Science	37
Psychology	43
Food Technology	36
Home Economics	10
Recreation Education	26
Business	29
Social Science	64
Mental Health	12
Total	505

Skyline College

Business	242
Undeclared	263
Public Service	138
Physical and Recreation	76
Extended Day Plan	138
Total	857

Total Enrollments San Mateo College District: 2,343

TOTAL ENROLLMENTS FIVE COLLEGE CONSORTIUM: 4,797

PROGRESS INDICATOR 2

THREE PATTERNS — Three patterns of cooperative work experience education programs have proven to be effective. They are designated as the Alternate Semester Program, the Parallel Program, and the Extended Day or Evening College Program. Each contains a necessary common element--an action link--of coordination between the on-campus instructional program and the field experience provided away from school.

The three plans which provide regular work experience related to college studies and career goals of the students are:

Alternate Semester:

Two students hold one full-time work station on a year-around basis. During each semester, one student is in school while the other works full-time. Working students may elect to enroll in a limited program of college studies. No limitation is placed on the location of the work experience. Students may be employed in other states or in distant cities. Employers are provided the equivalent of a full-time employee on a year-around basis.

Parallel Plan:

Students hold part-time, afternoon, evening, or swing-shift jobs with appropriate community college class loads. Coordination, job placement, and counseling services are provided by the college.

Extended Day or Evening College New Careers:

Special arrangements are made for college studies related to full-time employment and new career goals of students. Employers cooperate in work assignments and supervision. As in the other plans, students are provided with coordinator assistance, job placement, and counseling services provided by the college.

Through community college cooperative education students are attracted to career programs because of employment advantages and new learning opportunities. Open-ended curriculum arrangements allow these students to continue in full-time employment, or to move ahead into upper division studies in state colleges and universities.

PROGRESS INDICATOR 3

THE COMMUNITY AS AN EXPERIENCE LABORATORY

Cooperative Education in community colleges is proving to be a valuable cost-effective vehicle to bring about educational use of the multi-billion dollar laboratory which is the sum total of business, industry, and civic agency activity within the community.

3,200 employers are assisting community college students in the five college consortium to improve their skills, to expand their career opportunities, and to gain the benefits of on-the-job interaction with regular employees. College instruction is enriched by the "feedback" of students who are participating in assignments which have real meaning in the important work of the community. Students have the opportunity to influence their own career destiny through the process of seeking out experience that can be gained only through employment.

It is estimated that 25% of community college students of the 1980s will be enrolled in cooperative education programs. All of the change indicators in higher education point toward greater student "involvement", toward direct participation of students in real-life activities rather than simulated experiences.

From the standpoint of the community, cooperative education can be the means for training, re-training, and upgrading of those who need more education for career competence. Changing employment patterns of the future will no doubt require the kind of training flexibility which is inherent to the cooperative educational design.

Enrollment of 4,797 students in alternate semester, parallel, and extended day cooperative work and study assignments clearly places the five college consortium in a position of national leadership for the development of these innovative procedures in community colleges.

PROGRESS INDICATOR 4

COOPERATIVE EDUCATION ACHIEVEMENT BY MEASURABLE LEARNING OBJECTIVES

Plans for involving students in setting objectives as a part of their cooperative work experience program were initiated early in 1971. While somewhat awkward in the beginning, indications are that this evaluation procedure permits clearer understanding by students, employers, and coordinators of what cooperative work experience education is all about. To carry out this function coordinators need to receive in-service training in setting objectives, since it is essential that they be able to demonstrate the technique to students and employers. It is not an easy task. Students find it difficult at first to prepare meaningful and measurable objectives and coordinators report spending more time with students in the process.

It should be noted that this phase of cooperative work experience education occurs at the end of the term as well as within the first three weeks of each new term. An additional important feature of learning objectives is the opening of more effective dialog between students and employers. In the past, coordinators reported acting as intermediaries between non-communicating students and their supervisors. While this is still reported occasionally, the conversations necessary to plan objectives have substantially reduced this lack of communication. Students, instructors, coordinators, and employers are nearly unanimous in expressing satisfaction and a sense of accomplishment in moving forward with the concept of student measurable learning objectives for off-campus job experience.

On the following pages are three examples of student learning objectives as prepared and carried out on the job by students, coordinators, and supervisors. The first shows a student in dental technology (allied health careers); next is a student who works on a cooperative job in accounting; the third shows objectives of a technician in elevator installation and maintenance.

ORANGE COAST COLLEGE
COOPERATIVE EDUCATION

11 MARCH 1973
DATE

VETERANS ADMINISTRATION
EMPLOYER

STANTON D MULLEN
STUDENT'S NAME

STATEMENT OF JOB-ORIENTED LEARNING OBJECTIVES

Each semester that a student is enrolled in the Cooperative Education Program it is necessary that the college help the student determine what new or expanded responsiblities or learning opportunities are possible on his job. These objectives enable us to determine the units of credit that will be granted for work experience.

These objectives should be specific and measurable. They will be reviewed with the supervisor. At the end of the semester the student/employee and the supervisor will be asked to evaluate the level of attainment of each objective.

		END-OF-TERM RATING *	
		Student	Supervisor
1.	ABILITY TO POUR ALL TYPES OF DENTAL IMPRESSIONS. SHOW A CAPABILITY OF MAKING CUSTOM IMPRESSION TRAYS/STABILIZED BITE RIMS.	(1)	-
2.	SETTING AND ARRANGMENT OF TEETH - FULL DENTURES	(2)	4
3.	WAX CASES FOR TRY-IN WAX CASES FOR FINAL TRY-IN AND FINISH CASE	(3)	4
4.	INVEST DENTURES (FULL UPPER & FULL LOWERS, PARTIALS)	(4)	4
5.	BOIL OUT INVESTMENT & PAINT LIQUID FOIL TO CAST PACK & FINISH DENTURES	(5)	4

* Rating Scale

1 = Limited accomplishments.
2 = Average accomplishments.
3 = Better than average accomplishments.
4 = Far exceeds average accomplishments.

AGREEMENT

We the undersigned agree with the validity of the learning objectives listed above. The employer and the college agree to provide the necessary supervision and counseling to insure that the maximum educational benefit may be achieved for the employee/student's work experience.

There are three participants in the Cooperative Education venture. The student agrees to abide by the Cooperative Education guidelines. The supervisor will evaluate the employee/student's job performance at the end of the grading period. The college will award academic credit for work successfully accomplished.

Student's Signature

Supervisor's Signature

Instructor/Coordinator

Director

Distribution:
pink : Office of Cooperative Education, Gold : Employer, Yellow: Student, White: Rated at end-of-term to Office of Cooperative Education.

ORANGE COAST COLLEGE
COOPERATIVE EDUCATION

3-6-73
DATE

United California Bank
EMPLOYER

Richard W. Cady
STUDENT'S NAME

STATEMENT OF JOB-ORIENTED LEARNING OBJECTIVES

Each semester that a student is enrolled in the Cooperative Education Program it is necessary that the college help the student determine what new or expanded responsiblities or learning opportunities are possible on his job. These objectives enable us to determine the units of credit that will be granted for work experience.

These objectives should be specific and measurable. They will be reviewed with the supervisor. At the end of the semester the student/employee and the supervisor will be asked to evaluate the level of attainment of each objective.

1. By June 1973 I will develop a Master Charge Merchant calling program whereby the Merchant will be contacted twice per year.
2. By April 1, I will develop an effective collection program. I will set up a more efficient system of repayment followup by experimentation.
3. By the end of the semester I will expand my lending knowledge in the fields of Real Estate and Commercial Accounts. This will be accomplished through attending siminars conducted by our Head Office.
4. By June 1, I will be exposed to the responsiblity of the Customer Service Manager. This will be accomplished by instruction of my supervisor. The areas I will learn are: Personnel, Salary review and general supervision.
5.

END-OF-TERM RATING *	
Student	Supervisor
(1) 3	3
(2) 3	4
(3) 3	3
(4) 2	2
(5) P	D

* Rating Scale

1 = Limited accomplishments.
2 = Average accomplishments.
3 = Better than average accomplishments.
4 = Far exceeds average accomplishments.

AGREEMENT

We the undersigned agree with the validity of the learning objectives listed above. The employer and the college agree to provide the necessary supervision and counseling to insure that the maximum educational benefit may be achieved for the employee/student's work experience.

There are three participants in the Cooperative Education venture. The student agrees to abide by the Cooperative Education guidelines. The supervisor will evaluate the employee/student's job performance at the end of the grading period. The college will award academic credit for work successfully accomplished.

Richard W. Cady
Student's Signature

Instructor/Coordinator

Supervisor's Signature

Director

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ORANGE COAST COLLEGE
COOPERATIVE EDUCATION

March 20, 1973
DATE

Otis Elevator,
Bob Walker
EMPLOYER

Jon Henning
STUDENT'S NAME

STATEMENT OF JOB-ORIENTED LEARNING OBJECTIVES

Each semester that a student is enrolled in the Cooperative Education Program it is necessary that the college help the student determine what new or expanded responsiblities or learning opportunities are possible on his job. These objectives enable us to determine the units of credit that will be granted for work experience.

These objectives should be specific and measurable. They will be reviewed with the supervisor. At the end of the semester the student/employee and the supervisor will be asked to evaluate the level of attainment of each objective.

1. During this semester I will investigate all Company and Union Policies.
2. I will learn and apply safety procedures to all aspects of my work.
3. To learn and be able to recite any special language within the elevator company.
4. To develope a knowledge of the basic elevator print reading (papers showing elevator circuits).
5. Apply basic procedures , investigating and seeking any defects, of a computuer (when something goes wrong).

END-OF-TERM RATING *		
	Student	Supervisor
(1)	3	[illegible]
(2)	3	[illegible]
(3)	4	[illegible]
(4)	4	[illegible]
(5)	3	[illegible]

*** Rating Scale**

1 = Limited accomplishments.
2 = Average accomplishments.
3 = Better than average accomplishments
4 = Far exceeds average accomplishments

AGREEMENT

We the undersigned agree with the validity of the learning objectives listed above. The employer and the college agree to provide the necessary supervision and counseling to insure that the maximum educational benefit may be achieved for the employee/student's work experience.

There are three participants in the Cooperative Education venture. The student agrees to abide by the Cooperative Education guidelines. The supervisor will evaluate the employee/ student's job performance at the end of the grading period. The college will award academic credit for work successfully accomplished.

Jon Henning
Student's Signature

R. Cutler
Instructor/Coordinator

R. Walker
Supervisor's Signature

James E. Harmon
Director

Distribution:
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PROGRESS INDICATOR 5

COLLEGE OF SAN MATEO

COOPERATIVE EDUCATION EVALUATION REPORT 1972-73 PROGRAM PROGRESS

as reported by Dr. Lois Callahan, Director

Administration of the Program

Data processing facilities have been utilized whenever possible to provide data useful in meeting State regulations; i.e.: at midterm a mini-gradebook was used to verify continuing enrollment in a minimum of 8 units for all students. A system is being refined so that Co-op students may be listed by employer and by job classification. This will permit us to do a better job of cooperating with employers. Students have been assigned to coordinators earlier in the semester; assignment has been based upon job description rather than geographic location. Students who have not met their responsibilities have been withdrawn from the program before the end of the semester. Registration has been incorporated into the "mainstream" of procedures. Coordinators have been provided with class lists and grade report sheets. Coordinators have been serviced in every way possible--mailings, duplicating, et al. The Director has established parameters and policies for decision-making on student eligibility; e.g.: self-employed, volunteers, employed by relatives, etc.

Division Liaison

Divisions were asked to identify occupations which are ideally related to respective majors. A procedure was established for having Divisions approve work stations/duties which student indicates relate to his major. The Co-op office has assisted individual students in obtaining positions related to the major course of study and with opportunities for expanding occupational expertise. Coordinators have been assigned to students on the basis of their instructional specialties and practical experience to correlate with the students' duties. Students are enrolled in Co-op Ed. 47 by Division where related to the major. The selection of coordinators has been by mutual agreement between the Director and the Division Chairman.

Coordinated Instruction

Orientation meetings were conducted to assist students in developing their performance objectives and to communicate student, coordinator, and employer responsibilities in Co-op Ed. Five seminars on Job Analysis and Motivation were held for students in the general part of the program. Slide-tape instructional packages are being developed to assist students in deriving optimum benefit from the program. A bibliography of materials has been made available to coordinators and students. Student/Coordinator Handbooks have been distributed; Employer Handbook is being developed. Student objectives are being cataloged by job title for perusal by coordinators and students in preparing objectives in the future. Conducted in-service meetings for coordinators, bringing in employer to express views from the work station.

Employer Liaison

Student term papers are being submitted to employers. Employers have been asked to validate and evaluate student objectives. Staff has met with many employers to explain program and need for student to have a variety of learning experiences. Have assisted a number of employers in upgrading their own training programs. Have made concentrated effort to establish a wide variety of work stations corresponding with occupational programs on campus.

Many of the coordinators when calling this year on current employers have developed leads for additional jobs in the future. Based on past experience the special efforts of the coordinators will pay off with new work stations next year as well as through the retention of currently held stations when students now on the job leave school.

Each semester certain coordinators have had two or three units of time devoted entirely to work station development related to their academic discipline. And here is where selectivity has been centered.

This semester a political science instructor is working with local city and county government officials to develop, mainly, new parallel jobs, and arranging to hold jobs now held by students who will be leaving. It is clear that while only a few openings have been uncovered, the amount of interest evidenced by top executives is going to provide some very interesting openings for fall semester. These include new openings possibly in four government departments of a large city and special assignments with a privately supported governmental research agency (these to start in the summer).

Another instructor in the technician division is working primarily in the electronics field, with some attention given to firms in other technical fields. Employment in the electronics field is picking up on the peninsula and several firms have taken on CSM Co-ops this semester. One of these which has tried a Co-op on a "let's see" basis is so satisfied that more jobs are a strong possibility. This "bellweather" company's experience will be a strong influence on other firms.

A part-time Co-op Ed. staff member has spent a major share of time on planning, coordinating, and making development calls. These calls have been centered on large firms and organizations, many of whom are or have been employers of CSM students on a limited basis. Particular emphasis has been placed on utilities, banks, and insurance companies since all have large staffs with need for motivated beginners. Several openings will need filling in the fall.

Major breakthrough has been with one of the largest employers in the state. One or two isolated departments have had students on and off over the years dependent on hiring conditions. Now, this company, following our contacts with top officials, has authorized Co-op as one of its on-going training programs. Emphasis is on the employment of minority students (this company is one of the leading equal-opportunity companies). Two new openings are now in the "being filled" stage for summer and fall.

More than 350 hours will have been spent on work station development by the end of spring semester. While there have been some immediate results, unquestionably the major value is going to come next fall and throughout the year. Alternate semester stations develop slowly since they usually require special budgeting and arrangements but near-commitments indicate that some 15 or 20 new ones will be ready for filling if qualified students can be found. Every Co-op program has a problem of matching students and work stations.

A most encouraging trend is the apparent increase in employer involvement with students and training. A few examples will substantiate that more and more supervisors and other management people consider themselves a part of the "instruction" team, with this leading to an increased student learning experience whether or not accompanied by an upward tilt in title.

JOB DEVELOPMENT PROGRESS: COLLEGE OF SAN MATEO

A fashion design major starting as a part-time clerk in a top women's store has been encouraged to take courses in the field and has been given the opportunity to learn buying on the job. She has progressed steadily in responsibility and in experience. Her boss, the owner, who is a skilled merchandiser has matched the student's interest with his skill in marketing.

An electronics major with an alternate-semester job as a crewman-installer of the phones has not changed jobs, but has been given increased opportunity and responsibility because of initiative and hard work. The co-op work station was made possible through the senior management head's belief in cooperative education based on past experience. A hard driver, he has found co-op paying off for him and the students.

The supervising head of a workshop for handicapped children is closely supervising and encouraging a CSM physically-handicapped student learning stockroom operation and planning, a part-time (first-ever) paid job. The desire and perseverance of the student is being matched by the supervisor's interest and involvement.

Several alternate-semester junior naturalists, at an elementary school camp, have been trained and encouraged by the Camp Director to do a better job and crystallize their career objectives. Two of the junior naturalists on graduation from CSM have returned as full-time senior naturalists. At least two others were inspired to go on to higher educa tion in fields suggested by their nature camp work.

Two apparent facts have emerged during the program:

1. A very high percentage, over 95%, of all employers have had a good experience with CSM co-op students.

2. A majority of students, in all types of educational work experiences, have progressed steadily in responsibility and opportunity to learn.

Division chairmen, along with faculty members of their divisions, have made a distinct contribution to the development program. The Cooperative Education Program Director personally discussed with each chairman the ideal types of work stations that they would like to see students in their division placed in for good related work experience. The suggestions made have been very helpful in the selective approach to work station development. Division chairmen have welcomed the opportunity to contribute to the program showing an ever-increasing belief in and support of the program. Many of the department people have also made real contributions in helping match qualified students with related work experience stations.

CLASSIFICATION OF COOPERATIVE EDUCATION WORK STATIONS
FALL - SPRING 1972 - 1973

COLLEGE OF SAN MATEO

JOB TITLES	AGRICULTURE FORESTRY FISHERIES	CONTRACT CONSTRUCTION	MANUFACTURING	TRANSPORTATION	COMMUNICATIONS	RADIO & TELEVISION	UTILITIES	WHOLESALE & RETAIL TRADE	FINANCE: BANKING	FINANCE: REAL ESTATE	FINANCE: INSURANCE	SERVICES	GOVERNMENT	NONCLASSIFIABLE ESTABLISHMENTS
airline mechanic				29	49									
answering service clerk														
apt. building maintenance man														
appraiser trainee														
assistant manager														
assistant operations officer														
barber														
bartender														
beautician								2						
bookkeeper														
bowling alley deskman & mechanic														
building inspector														
bushow														
carpenter		3	5											
cashier								11						
claims adjuster														
claims investigator														
coin press foreman														
computer programmer				2										
cook								9						2
coroner's laboratory technician														
credit clerk														
customer service clerk (complaints)								1						
customer service representative								1						
customs inspector														
delivery clerk								11						
department store security														
dental assistant														
dishwasher														
draftsman					1									
drug abuse counselor														
electrical engineer			1	1										
electrician's helper														
electronics technician			9	28		8								
engineering aide			3											
engineering technician			5	10										
esrow officer														
fast food operation manager								4						2
film packager			1											
fireman														
flight traffic officer				9	3									
florist	1													
gardener	7	8					11	13	3	2				
general office clerk														
glazier		2												
golf instructor														
grocery checker								20	17					
hospital lab assistant														
hospital dietician aide														
janitor								5	8					
legal desk clerk								2	5					
installer							1	6						
janitor														
keypunch operator							4		2					3
laboratory technician														
lacinator		1												
library aide														
machinist			2	7										
machinist's helper			1											

JOB TITLES	SERVICES	GOVERNMENT	NONCLASSIFIABLE ESTABLISHMENTS
mail clerk	1		
map maker	3		
materials analyst			1
mechanic			
mechanic's helper			
medical abstractor			
medical assistant			
meter reader			2
motion picture producer			
newspaper ad compositor			
newspaper cirulation supervisor			
occupational therapist			
office manager			
order checker			
painter			
park maintenance person			
parking attendant			2
passenger service rampman			
pest controller			
photographer	1		
policeman			
postal clerk			
printer			
production control inspector			
proof of deposit operator			
public relations clerk			
purchasing agent			3
quality control clerk			
radio dispatcher		2 1	
receptionist			
recording engineer	1		
recreation leader			
repairman		1 4	
restaurant manager			2 4
sales clerk			97 243
salesman or woman			5 14
seamstress			
school bus driver			
secretary			5
service station attendant			19 19
shipping and receiving clerk			34 7
silk screener			
small business manager			5 6
stock controller			3 8
teacher aide			
telephone operator			4
television engineer	1 5		
television program director	4		
television newsperson	1		
television repairman			
teller			
ticket agent			3
traffic operations supervisor			
vacuum cleaner demonstrator			1
videofile operator	1		
waitress			11 8
xray technician assistant			

PROGRESS INDICATOR 6

DATA PROCESSING SUMMARY: GOLDEN WEST COLLEGE

GOLDEN WEST COLLEGE - SUMMARY OF HISTORICAL FACTS
FALL SEMESTER, 1973

Section A: Recorded Student Enrollments

(1) Number of Students (Entire Population)	13,396
(2) Number of Students (Work Experience)	946
(3) Number of Students (Not Work Experience)	12,450
(4) Percentage of Population Enrolled in the Work Experience Program	.071

Section B: Student Retention

(1) Number of Students Completing at Least One Section (Entire Population)	11,714
(2) Number of Students Not Completing at Least One Section (Entire Population)	1,682
(3) Number of Students Completing at Least One Section (Work Experience)	900
(4) Number of Students Not Completing at Least One Section (Work Experience)	46
(5) Number of Students Completing at Least One Section (Not Work Experience)	10,814
(6) Number of Students Not Completing at Least One Section (Not Work Experience)	1,636
(7) Retention Percentage (Entire Population)	.874
(8) Retention Percentage (Work Experience)	.951
(9) Retention Percentage (Not Work Experience)	.869

Section C: Units Attempted

(1) Total Units Attempted (Entire Population)	94,942.0
(2) Total Units Attempted (Work Experience)	10,837.5
(3) Total Units Attempted (Not Work Experience)	84,105.5
(4) Average Units Attempted (Entire Population)	7.0
(5) Average Units Attempted (Work Experience)	11.5
(6) Average Units Attempted (Not Work Experience)	6.75

Section D: Units Completed

(1) Total Units Completed (Entire Population)	73,816.5
(2) Total Units Completed (Work Experience)	9,854.0
(3) Total Units Completed (Not Work Experience)	63,962.5
(4) Average Units Completed (Entire Population)	6.3
(5) Average Units Completed (Work Experience)	10.94
(6) Average Units Completed (Not Work Experience)	5.9

PROGRESS INDICATOR 7
GOLDEN WEST COLLEGE: PROGRESS SUMMARY

Mr. Karl Strandberg, Director, Cooperative Work Experience reports:

Each semester we calculate our Co-op withdrawal rate so that we can compare it with the withdrawal rate experienced in both day and evening college. Historically we are experiencing a 12.9% withdrawal in Cooperative Education. This compares with 33-1/3% - 40% withdrawal rate in the day college and evening college programs. It appears, then, that work experience does have a significant impact in terms of student retention.

I believe that the numbers of employers who are cooperating with us is a strong indication of their positive responses to Cooperative Education. We at Golden West College are presently relating to 750+ employers. Recently we were advised by personnel representatives that the concept of Cooperative Work Experience Education had been introduced in several company salary bargaining sessions and was received with enthusiasm. Many employers see the granting of work experience credit to their full-time employees through co-op as an incentive to encourage the employees to continue their education.

We have an increasing number of employers who are participating with us in company sponsored training programs. I recently had a long interview with representatives from a major employer during which we brainstormed training needs that the college could be helpful in solving. Many of these training needs are in the area of management courses. We talked about different delivery systems; late afternoon seminars, weekend seminars, modularized instructional packages, and use of videotape or films. It indicates that Cooperative Education works two ways:

1. We identify students who are interested in a particular kind of work experience and look to the companies to provide either part-time or full-time employment to help the students expand their learning opportunities;
2. Employers identify employees who can benefit from additional training programs offered at the college.

The full-time employment that has resulted from our involvement in the alternate semester system has been positive . For example, we had a pair of students on the alternate semester system with a public utility. Both of these students were offered full-time employment when they received their A.A. Degree and are presently working as technical representatives. My understanding is that one of these students has chosen to continue his education in the evenings at California State University at Long Beach. Another pair of students that were on the alternate program in elevator technology have likewise been employed upon their completion of the A.A. Degree Program. One of these students has recently received a promotion and will be continuing his education at CSULB. These are just two examples of many that I could mention where full-time employment results from the Cooperative Education experience. Too, it is encouraging to note that our students are able to perform well on their full-time jobs.

Some recent analyses conducted by our Director of Educational Services indicates that we should experience a significant increase in the number of students in our Cooperative Work Experience Program. Our data suggests that an increasing number of students are getting full-time employment right after high school and

are returning to the campus during the late afternoon and evening hours. The trend in our area seems to be toward continuing one's education on a part-time basis. My guess is that Co-op work experience will continue to be an important incentive to motivate the students to continue their education. Too, this trend has significant impact on each of our vocational programs. Our technology instructors advise us that their students are being placed on full-time jobs as soon as they have obtained entry-level skills. These students then move from day college (full-time student) to evening college (part-time student). Again, our hope is that Co-op can be a significant incentive, encouraging these students to stay in college. What we are working on is a different way of serving what has previously been classified as "the dropout".

A number of employers report to us that the work experience student has an advantage over the student who has not had work experience related to their major. A bank manager recently reported that given two students with equivalent capabilities, he would choose the one who had work experience. Our counselors recently reported that the state colleges and universities require work experience as one of the admission requirements into the teacher training programs. This has become true also of admission into the four-year college Social Service Programs.

We believe that Co-op is a significant incentive for the veteran to continue his education. A survey of our evening college enrollment indicates that approximately 40% of our evening college work experience students are receiving veterans benefits. Too we are beginning to do some special counseling and placement of the veteran. Our hope is that we can continue to develop this part of our program.

We are finding that an increasing number of students are benefiting from career expansion through volunteer jobs. Two of our vocational programs, Social Service Associate and Instructional Aide, have a number of students who are working in volunteer jobs. We work closely with the Orange County Probation Department who places a number of our Social Service students. These students have an opportunity to test out their career choices. The elementary school instructors in our area provide a number of volunteer opportunities for students who are interested in our Instructional Aide Program. Our projection is that a number of these students in both of these programs will choose to take full-time employment upon completion of their AA Degree and then will pursue upper division work on a part-time basis. Volunteer employment allows us to respond to the career exploration needs of special groups, namely, veterans, women, retired persons, etc.

We are desirous of broadcasting the benefits of cooperative education for the Evening College student. I think a recent comment from a former student reflects our desire. He said that it was refreshing that the college was willing to recognize the educational value of his full-time job and reflect this recognition by allowing him to earn units of credit. He said that the requirements for an AA Degree appear overwhelming to the Evening College student. However, with the addition of three or four units each semester of Co-op work experience credit, the AA Degree goal does not appear insurmountable.

GOLDEN WEST COLLEGE, PROGRESS SUMMARY (Continued)

The most exciting innovation for many is the measurable learning objective. We have introduced this concept at counselor workshops, regional and national conferences. Each time we make a presentation the idea of learning objectives for work experience students is well received. Our last presentation was at our AACJC Conference at Disneyland in February. We have had at least two dozen inquiries for information not only about the learning objectives part of our program, but also about each of the other concepts that we have been testing as part of the consortium demonstration model. We can supply strong evidence that we are articulating the results of our demonstration model with community college representatives nationally.

PROGRESS INDICATOR 8.

LAW ENFORCEMENT PROGRAMS, COAST DISTRICT

In 1972 seventy-five law enforcement officers were participating in an upgrading program through community college cooperative education. All of these were full-time policemen, highway patrolmen, or sheriffs department employees upgrading their skills and efficiency through community college cooperative education. In addition to regular Associate Degree academic requirements the officers were required to meet one of four options for their cooperative assignments. The objective options included: 1) a departmental experience in which the officer worked a minimum of 16 hours of off-duty time with some other agency in the criminal justice field other than his own; 2) intra-departmental experience, meaning that the officer spent a minimum of 16 hours in off-duty time in some division other than that in which he is assigned within the same agency; 3) development of a research paper on law enforcement in relationship to the regular work assignment during off-duty time, and 4) an administrative designated project in which the officer completed special staff work assigned by his supervisor to improve the quality of local law enforcement.

It is the feeling of those participating that a tremendous learning experience has been provided through cooperative education that has both motivated and enhanced their professional experience as law enforcement officers. The cooperative assignment included attending regular departmental training meetings in addition to spending time in court proceedings. A high level of dedication to department and professional career development is evidenced.

Coordinators of the law enforcement programs feel that this is highly professional approach to gaining academic and skill development in law enforcement. The chiefs of police and other law enforcement officials appear to be highly receptive to this cooperative approach to the development of professional officers.

PROGRESS INDICATOR 9.

NEW CAREERS FOR WOMEN THROUGH COOPERATIVE EDUCATION

Community colleges can provide leadership in opening the doors to new employment opportunities for women. Through cooperative education it is evident that careers for women can be improved.

Mrs. Tannisse Rost of the Evening College of Cañada College provides the following report on the need and opportunity for new development.

"The life expectancy, employment life expectancy, marital and childbearing patterns of American women have undergone drastic changes in recent decades. In turn those changes have had a massive impact not only on the women but on the individuals and institutions around them--their husbands, children, employers, helping agencies and educational institutions. It comes as a shock to realize that women themselves and the society around them are largely unaware of the impact of these changing life patterns and how to plan wisely to deal with them."

> Women today live substantially longer than their counterparts half a century ago. The life expectancy of a woman in 1900 was 48 years--2.8 years longer than her husband. Today that life expectancy is 75 years and still climbing!
>
> About half of today's young women are married by age 20; they will have had their last child by about age 30; and by the time the youngest child is in school, the mother will have close to 40 YEARS OF LIFE AHEAD TO PLAN FOR.
>
> In 1920 the average woman worker in the nation was single and 28 years old. In 1968 the median age was 40 and the average woman worker was married.
>
> More than half of today's young women will work full time for 25 years or more.
>
> The percentage increase of California women workers in the last nine years has been nearly 50%. (48.3)
>
> The overwhelming majority of California women workers are members of the work force from economic necessity and women workers tend to be concentrated in low-paying jobs.
>
> The number of women-headed families on welfare in California has nearly doubled in the last two years. In 1968 the number of such families was 158,000. In 1970 the number had increased to 296,000.

At the turn of the century, women workers in California accounted for 13% of the work force. In 1970 3,000,000 California women worked outside the home and comprised over 37% of the total work force. The trend is not a temporary phenomenon. Between 1960 and 1970 their numbers increased by 55.5%.

The number of divorces granted in California during the last decade has increased by 148%. From 1960 through 1970, 678,000 final decrees of divorce were granted, and 60% of the families involved had children under 18.

More than 1 in 10 families in the nation are headed by a woman, and women-headed families have increased by 24% during the last decade. 36%--numbering 1.8 million women-headed families--had incomes below the poverty level in 1970.

More than a million children in California need child care because their parents work, and the total capacity of licensed or supervised childcare facilities, whether public or private, profit or non-profit, will accommodate only 125,000 children.

42% of California's teenage girls doubt their ability to be successful in chosen fields of work, and most do not see themselves as achievers.

Teenage girls lack understanding of the need for retraining or education as they grow older.

In one California Status of Women Commission study, teenage girls were asked for their view of their futures. Only 31% planned on college; a scant 3% saw a need for education or training at age 30, and only 2% at age 40.

"The cause-and-effect relationship of these facts and conditions is clear. Girls who do not see themselves as achievers don't get education or training for work with much economic potential. If they are divorced and have small children, lack of child care at a cost they can afford often places them in poverty or welfare.

"Because a working mother must care for home and children in the evening, added education for a higher-paying career is difficult if not impossible. Cooperative Education in community colleges is one effective solution to this problem for women."

PROGRESS INDICATOR 10

NEW PROGRAM DEVELOPMENT: COOPERATIVE EDUCATION, CAÑADA COLLEGE

RESEARCH AND DEVELOPMENT ASSISTANT

(DD&E) Design, Development & Evaluation

The program in Research and Development Assistant is designed to train personnel who can assist in research investigation, development, evaluation and communication of results, applying innovative information gathering techniques to the changing community needs.

Skilled DD&E technicians can apply their knowledge of data analysis, summary, evaluation and communication to provide day-by-day or week-by-week decision making information for the purpose of improving operations of business, industry and public agencies. DD&E courses have general educational value to students in most major fields.

The program in Research and Development Assistant was developed by the Far West Consortium, a group of public and private research and development agencies in the Bay Area which has cooperated to help produce the program at Cañada College.

A basic part of the DD&E program is the opportunity for the student to participate in cooperative education at selected community agencies. Together, the student, his counselor and his prospective employer will set up a plan of work for which he will receive college credit and be paid.

CAREER OPPORTUNITIES

The A.A. degree in Public Service Careers with specialization in Research and Development (Design, Development and Evaluation) will qualify graduates for para-professional level jobs in schools, businesses, research organizations and other industries.

The program in Research and Development Assistant can be related to careers in public service, management, supervision, and education.

Social Science 10 – Interaction and communication for the Paraprofessional. Designed to develop human interaction and communication skills. These include listening and speaking skills such as: conference techniques, interviewing, briefing, specialized reading skills and writing methods used in note taking, technical writing, and formal and informal report preparation.

Social Science 11 – Introduction to Planning and Design. Introduces the student to the general concepts of planning and design techniques. Emphasis is placed on problem solving, research procedures, and adaptation to the resource limitations of the agency. The course also includes experience in applying these skills in an educational, research, industrial and/or business environment.

Statistics 1 (DD&E) – Information/Data Collection and Organization. Introduces the student to basic methods of collecting and presenting information. These include searching out, retrieving, and organizing documentary information, and the basic procedures for finding, organizing, analyzing and displaying data.

Social Science 12 – Evaluation and Analysis. Provides instruction in the methods and processes involved in preparing evaluations for management judgements or decisions. Focus is on the actual process of evaluation and on some of the methods for updating and evaluation on the basis of new evidence. Considerable time and attention is given to methods of condensing and digesting quantities of information in order to reach an adequate understanding of its significance and relevance. Case studies and projects will be included. Cooperative education experience opportunities are available.

Social Science 13 – Developmental Engineering. A skills-oriented course in which, through a series of selected developmental case studies, simulated tasks and projects, the student learns how to search out, evaluate and use data, materials, tools and resources to "put things together" (compile research) in new and purposeful ways.

PROGRESS INDICATOR 11

Gilberto de la Rocha
Cooperative Education
Cañada College

BI-LINGUAL AIDE INTERN PROGRAM

The number of Spanish-speaking students in California each year grows significantly larger. In San Mateo County the percent of Spanish-speaking, Spanish-surnamed population has grown from 4.5% to 11.5% between the years of 1960-1970. The elementary schools have not been and are not able to cope with the rapid growth of Latinos. In order to help meet the growing demand for bi-lingual assistance in the classroom, and in order to encourage college bi-lingual students to be aware of the field of teaching, the Bi-lingual Aide Intern Program has been developed.

Bi-lingual Aide Interns are placed in cooperative work stations at schools that have such a need. They work under the direct supervision of the classroom teacher with guidance from a bi-lingual cooperative education coordinator.

Types of work-learn educational experiences:

1. Meeting non-English speaking students and helping them feel "at home" by explaining in their native language the general expectations of students, by the school.
2. Instruct the non-English speaking student in English as a Second Language.
3. Act as an interpreter between the student, his peers, and teachers.
4. Act as liaison between the school and non-English speaking parents, when necessary.

S. A. I. PROGRAM FOR MINORITY AND DISADVANTAGED STUDENTS:
STUDENT ADMINISTRATIVE INTERN, CAÑADA COLLEGE

Because of the low-level entry work that is done by a vast number of minority students and because a large number of these students progress slowly through the work ladder, it is felt that a different entry level of experience will provide new vistas and will be highly motivational, benefitting them substantially.

Basically, selected students are placed as interns with top level administrators in elementary and secondary schools, civic agencies, as well as in business and industry. The students spend a few hours each day with the administrator attending conferences, seminars, or discussions that are part of the administrator's normal routine. It is felt that these students will benefit from this level of contact, develop an improved insight as to the problems in administration, and by virtue of these improved horizons, raise their level of expectancy and increase their motivation.

Each student intern and administrator jointly develops a reasonable work schedule and work program. It is understood that the administrator will at times be engaged in an activity that must by its very nature preclude student participation. Otherwise students join in most activities as assigned.

EL CLAMOR

Gil de la Rocha

Información sobre Trabajo y Educación

PROGRAMA DE SECRETARIA Y TRABAJO
GENERAL DE OFICINA

REQUISITOS: Para ingresar al Colegio de Cañada el estudiante debe ser: 1. Residente del Condado de San Mateo. 2. Mayor de 18 años. 3. No es indispensable haber completado la escuela secundaria.

TRABAJO DE SECRETARIA: La amplia variedad de tareas que ejecuta la secretaria es una de las satisfacciones de trabajar en esta profesión. Además de tomar dictado y transcribir, la secretaria puede archivar papeles y documentos, contestar el teléfono, operar la central telefónica, usar las máquinas de calcular y duplicar, concertar entrevistas, arreglar conferencias, mecanografiar informes y discursos y llevar contabilidad de gastos. A medida que van desarrollando destrezas de oficina se les encomienda tareas que requieren mayor grado de iniciativa, juicio y responsabilidad. Muchos ejecutivos dan a sus secretarias labores de asistentes administrativos.

INFORMACION ADICIONAL: Para calificar como secretarias para trabajar para el Condado, el Estado o el Gobierno Federal, la secretaria debe tomar dictado por lo menos de 80 palabras por minuto y mecanografiar por lo menos 40 palabras por minuto. Generalmente se requiere un diploma de escuela secundaria o el certificado de educación general G.E.D. ademas de los conocimientos generales de trabajo de oficina. Los sueldos varian de $87 a $140 por semana. La mayoría de las secretarias han recibido promociones y empezado sus carreras como estenógrafas. Ser bilingües en inglés y español es especialmente útil.

EDUCACION SUGERIDA PARA CONSEGUIR EMPLEO:

Ingles	Contabilidad	Máquinas de Oficina
Taquigrafía	Archivo	Leyes de Negocios
Mecanografía	Matemáticas de Negocios	

SI USTED DESEA EDUCARSE PARA CALIFICAR COMO SECRETARIA PUEDE DIRIGIRSE A:

Louis Yaeger, Jefe de la División de Negocios, Colegio de Cañada, 4200 Farm Hill Blvd., Redwood City, California 94061. Teléfono: 364-1212, Ext. 201.

Thomas W. George, Jefe de la División de Negocios, Colegio de San Mateo, 1700 W. Hillsdale Blvd., San Mateo, California. Teléfono: 574-6495

SI USTED TIENE LAS CALIFICACIONES Y DESEA EMPLEARSE COMO SECRETARIA PUEDE DIRIGIRSE A:

Marian Mills, Peninsula Chapter of Executive Secretaries - Teléfono: 367-4117
Sam Elkins, Oficina de Empleos del Distrito de Colegios de San Mateo, Teléfono: 349-5125

EL CLAMOR

Información sobre Trabajo y Educación

PROGRAMA DE ASISTENTE DE MAESTRO

REQUISITOS: Para ingresar al Colegio de Cañada el estudiante debe ser: 1. Residente del Condado de San Mateo. 2. Mayor de 18 años. 3. No es indispensable haber completado la escuela secundaria.

PROGRAMA: El programa prepara a los estudiantes a realizar labores de asistente de maestro en las escuelas primarias. El programa está equilibrado entre cursos en el colegio y experiencia supervisada por el colegio, bajo el programa de Educación Cooperativa, trabajando como ayudante de maestro en adiestramiento en las escuelas del área. El programa comprende dos años de adiestramiento en conjuncion con el título de Asociado en Artes (A.A.)

GASTOS: Se anticipan los siguientes gastos para cada semestre: $3.75 por servicios de salud pagaderos al momento de registración, aproximadamente $30.oo para libros. Existen ciertas formas de ayuda financiera para estudiantes que tienen problemas economicos.

AYUDA TUTORIAL: Existe ayuda tutorial para estudiantes que tienen problemas con sus materias o con el ingles.

CAÑADA COLLEGE es uno de los tres colegios en el Distrito Escolar de San Mateo. El colegio ofrece una gama completa de títulos A.A. y programas de certificados que preparan a los estudiantes para empleo inmediato o para transferir a las universidades de cuatro años.

SI USTED DESEA EDUCARSE PARA CALIFICAR COMO ASISTENTE DE MAESTRO PUEDE DIRIGIRSE A:

Cañada College, 4200 Farm Hill Blvd., Redwood City, Ca. 94061, Teléfono: 364-1212

Dr. Melvin Pratt, Extensión 202
Mr. Bennett Kilpack, Extensión 216
Mrs. Eileen Smith, Extensión 295
Sr. Jaime Custodio, Extensión 300, 301 ó 302

Educación Cooperativa · Colegio de Cañada
4200 Farmhill Blvd · Redwood City

PROGRESS INDICATOR 13

COOPERATIVE EDUCATION WORKSHOP

Dissemination of information about community college cooperative education has been underway with particular strength demonstrated by the Coast District in offering a California state-wide conference for college administrators and coordinators of community college cooperative education work experience programs. The conference was held February 24, 25, 26, 1972 at the Disneyland Hotel, Anaheim, California.

Mr. Vaughn Redding, Coast District Director, with the assistance of Mr. Jim Garmon, coordinator from Orange Coast College and Mr. Karl Strandberg, coordinator at Golden West College provided leadership for the conference. Moderators from colleges and from employers served to lead the discussions. Problems were identified and solutions sought through shared experience.

Major speakers included Mr. Leland Baldwin, Vice Chancellor, California Community Colleges, Dr. Norman Watson, Chancellor, Coast Community College District, Dean Roy L. Wooldridge, Vice President, Northeastern University, Boston and Mr. Clifford Fields, Dean of Careers, Malcolm X College in Chicago. Dr. L. O. Brockman of California State College at Fullerton, California served as workshop evaluator. The following topics were discussed:

A Chancellor's Views on Cooperative Education
Planning and Seminars for New Coordinators
Job Development and Employer Relations
Cooperative Education: Now and in the Future
Cooperative Education for Evening College Students
Planning and Organizing Cooperative Education Program
Placement and Coordination of Minority Students
Pay for Coordinators and Program Budgeting
Developing the Alternate System
Student Learning Objectives
Related Information Classes and Independent Study
Working with the Veterans Administration
Managing Cooperative Education with Computer Utilization

COLLEGE OF SAN MATEO

DEPARTMENT OF CO-OPERATIVE EDUCATION

SAN MATEO, CALIFORNIA

STUDENT REPORT

(TO BE FILLED OUT BY STUDENT)

INSTRUCTIONS: The student should complete this portion of the report form and leave it with the employer for his evaluation. The employer should mail this form to the College in the accompanying self-addressed envelope.

Date August 15, 1973

Name Smith (Last), James (First) R. (Middle)

College San Mateo Major Aeronautics Year Soph Division A

Employing Firm S.F. Bay Airlines

Department Maintenance Job Title Stock Clerk

Supervisor's Name R. Jones Title Mgr.

Attendance: Time Late 0 Reason —
Times Absent 1 Reason Illness

Gross Pay: Hour $2.21 Gross Pay
Week $88.40 Full Period $1149.20

Brief Job Description:

I am in charge of ordering & stocking of parts & materials for the maintenance division.

Comments:

For my next Coop assignment I have been advanced to the engine repair division.

EMPLOYER'S EVALUATION

(TO BE FILLED OUT BY EMPLOYER)

The employer will please express his candid opinion of this student as a worker in his employ. Criticisms and comments are earnestly solicited. This information will be utilized by the co-ordinator for the guidance of the student.

RELATIONS WITH OTHERS
- [x] Exceptionally well accepted
- [ ] Works well with others
- [ ] Gets along satisfactorily
- [ ] Has some difficulty working with others
- [ ] Works very poorly with others

ATTITUDE — APPLICATION TO WORK
- [ ] Outstanding in enthusiasm
- [x] Very interested and industrious
- [ ] Average in diligence and interest
- [ ] Somewhat indifferent
- [ ] Definitely not interested

JUDGMENT
- [ ] Exceptionally mature
- [x] Above average in making decisions
- [ ] Usually makes the right decision
- [ ] Often uses poor judgment
- [ ] Consistently uses bad judgment

DEPENDABILITY
- [x] Completely dependable
- [ ] Above average in dependability
- [ ] Usually dependable
- [ ] Sometimes neglectful or careless
- [ ] Unreliable

ABILITY TO LEARN
- [ ] Learns very quickly
- [x] Learns rapidly
- [ ] Average in learning
- [ ] Rather slow to learn
- [ ] Very slow to learn

QUALITY OF WORK
- [x] Excellent
- [ ] Very good
- [ ] Average
- [ ] Below average
- [ ] Very poor

	Reg.	Irreg.		Reg.	Irreg.
ATTENDANCE:	[x]	[ ]	**PUNCTUALITY**	[x]	[ ]

	Excellent	Very Good	Average	Marginal	Poor
OVERALL RATING:	[x]	[ ]	[ ]	[ ]	[ ]

COMMENTS (over if necessary)

Jim has proven to be an excellent employee. He is now in line for advancement.

(Signed) Robert N. Jones
(Company Representative)

This report has been discussed with the student Yes [x] No [ ]

Cooperative Education

Employer Evaluation of Student On-The-Job Performance

(N = 650 student evaluations)

		Value to the Employer Measured on a 5.00 Judgment Scale		
RELATIONS WITH OTHERS	Exceptionally well accepted	4.22	34%	
	Works well with others		56%	
	Gets along satisfactorily		9%	
	Difficulty working with others		1%	
	Works very poorly with others		—	
JUDGMENT	Exceptionally mature	3.79	21%	
	Above average in making decisions		37%	
	Usually makes the right decision		41%	
	Often uses poor judgment		1%	
	Consistently uses bad judgment		—	
ABILITY TO LEARN	Learns very quickly	4.24	41%	
	Learns rapidly		42%	
	Average in learning		16%	
	Rather slow to learn		1%	
	Very slow to learn		—	
ATTITUDE APPLICATION TO WORK	Outstanding in enthusiasm	4.00	23%	
	Very interested and industrious		57%	
	Average in diligence and interest		17%	
	Somewhat indifferent		2%	
	Definitely not interested		1%	
DEPENDABILITY	Completely dependable	4.18	43%	
	Above average in dependability		33%	
	Usually dependable		21%	
	Sometimes neglectful or careless		2%	
	Unreliable		—	
QUALITY OF WORK	Excellent	4.21	35%	
	Very good		51%	
	Average		14%	
	Below average		—	
	Very poor		—	
OVERALL RATING	Excellent	4.10	34%	
	Very good		53%	
	Average		11%	
	Marginal		1%	
	Poor		—	
ATTENDANCE	Regular		97%	
	Irregular		3%	
PUNCTUALITY	Regular		97%	
	Irregular		3%	

PROGRESS INDICATOR 15

CAREER EDUCATION K-14: SAN MATEO COUNTY WIDE PROJECT INCLUDING COMMUNITY COLLEGE COOPERATIVE EDUCATION

An innovative approach to the development of comprehensive career education is underway through the joint efforts of the San Mateo Community College District and other school districts in San Mateo County. The basic principle is one of identifying and developing within the county innovative segments of courses which deal with instruction related to career education. The task is 1) to strengthen the present activities; 2) develop new curriculum materials from kindergarten through community college, and 3) distribute and implement these career materials horizontally and vertically throughout the county.

Vertical articulation units are elementary districts, secondary districts and the county-wide community college district. Lateral articulation occurs through meetings of interest groups as, for instance, all sixth grade instructors, all junior high school instructors, or all high school work experience coordinators. This method of career development has been identified as a "checkerboard" system.

Through the cooperative education program of the community colleges, combined with academic and vocational instruction provided in regular programs, there is the potential for development of a comprehensive model for community college career education. An important component of such a model program would be a community guidance center for career awareness, information and consultation, as well as instruction in skill development.

ARTICULATION WITH ELEMENTARY AND SECONDARY SCHOOLS

Developments of career education aspects of the project have focused on 1) contacts with secondary school work experience feeder programs to assure that students are aware that continuity of co-op experience is available to them, and 2) preparation and showing of films and tapes for elementary and secondary schools. Television broadcast is one of the direct means that has brought the co-op message to younger students.

The significant principle involved is the model of older brothers and sisters attending college through the cooperative plan. Younger student interest is attracted because of unusual experiences and good paying jobs that become available through this kind of college plan. For those who might not plan to attend college because of financial limitations it is evident that career goals can be reached through cooperative education in the community college.

Television films of high quality were completed by both the northern and southern components. The Coast District film entitled WHERE AM I GOING? has been particularly well received. It has been shown to a wide variety of audiences with enthusiastic response. The target audience of the film is secondary level.

Several 35mm slide-sound packages have been prepared to encourage elementary and junior high school students to begin thinking of careers. The message includes the notion that a good way to prepare for many careers is through the community college co-op programs. Evidence that has been gathered indicates that career awareness among young people is increased through the model of "older brother-sister participation".

COOPERATIVE EDUCATION DIRECTORS

take pleasure in inviting you and your guests

to an initial showing of

"WHERE AM I GOING"

a Cooperative Education movie

produced by

Telecommunications Personnel for

GOLDEN WEST AND
ORANGE COAST COLLEGES

Friday evening, the twenty-eighth of April

at seven-thirty o'clock

Dessert will be served - Movie will be shown in
Studio One - followed by a tour of
Telecommunications Center

Golden West College, 15744 Golden West Street
Huntington Beach, California 92647

R.s.v.p. Vaughn Redding 834-5623
James Carmon 834-5628
Karl Strandberg 892-7711

125 employers, students and guests participated in the premier showing at the new Telecommunications Center. This gave the participants an opportunity to see themselves in action and to become better acquainted with the emerging role of television in education.

PROGRESS INDICATOR 16

COMMENTS FROM STUDENTS, EMPLOYERS AND SUPERVISORS: CAÑADA COLLEGE, COLLEGE OF SAN MATEO, AND SKYLINE COLLEGE

Student: Maryanne Marty, Business Major, parallel plan, clerk, Credit Department, Sears.

"The experience I am receiving from this job will not only help me in my career but I feel most of all it will help me to manage my own money and household. Since I have been working in a credit department I have developed strong feelings against buying merchandise on timed payments."

Cooperative Education Supervisor's and Employer's Comment: "Maryanne's employer says she learns rapidly and is a very good employee--well-liked by everyone in the store."

Student: Eugene Doyle, Electronics major, parallel plan, AVTEK Corporation, Burlingame

"My job at AVTEK gives me understanding in not only electronics and its principles but in many fields like component checking, engraving, designing, being able to read schematics of the P.C. card; shopwork like designing, cutting, drilling, taping, grinding, sawing, and many other things including the knowledge gained from the other people in our company. So my job at AVTEK has many things to do with my studies at Skyline. For one thing, it lets me learn about electronics a great deal, a major part of physics, which I am studying at Skyline. Also other things like speech, learning from different people at work is possible through Co-op. So AVTEK Systems has been and still is helping me in many ways."

Cooperative Education Supervisor's and Employer's Comment: Mr. Bell who is Eugene's boss states, "Eugene is a valuable employee because he is so interested in his work and can be counted on to do a good job."

Student: Jean Sprouse, Business Major, extended day student, Secretary, Police Department, South San Francisco.

My studies help me and my work aids my studies. Several of the courses I have taken at Skyline have related directly to my work. Introduction to computerization made me aware of the limitless potential of that field and gave me a simple knowledge of some of its language at a time when we were beginning to explore its possibilities for our business. Basic accounting dovetailed into payroll work and budgeting both of which have been areas of my concern. Human relations is of constant daily use and value."

Cooperative Education Supervisor's and Employer's Comment: Jean's employer gives her an overall rating of excellent on her job. He says, "She devotes a great deal of time to her duties and anticipates the tasks that need to be accomplished."

COMMENTS (Continued)

Student: Joe Hunter, Sociology major, parallel plan, aide at Opportunities Industrialization Center, San Bruno Police Department

"San Bruno Police Department has begun a program to bring minorities into the department. This was done by creating a job opening below patrolman known as CSO's or Community Service Officers. The CSO's role is traffic direction, clerical, and any other duty that will release the patrolman of menial tasks. Also the CSO works in the community to help minority groups relate to police in the role of peace keeper, rather than repressor. Through Social Science 11 and contacts with Captain Cann, San Bruno Police Department, over the last semester I have grown to know and respect the role of police."

Cooperative Education Supervisor's and Employer's Comment: Joe's supervisor states, "Joe is a big help in working with the community. He is one of the students most active in this program and is a willing, eager student."

Student: Janet Ynostroza, Public Service Career Major, parallel plan, Training Committee Aide

"Working through economic opportunity commission on a daily basis has been a valuable experience for me in many areas; working with people cooperatively every day, actually seeing and sometimes being a part of the red tape procedure and the job that EOC is expected to accomplish. It has certainly been a period of personal growth and has enlightened me in many areas of social services. One of the most enjoyable sections of the aide position was working with the youth organizers, in areas of training development. The enthusiasm of youth is contagious and their receptiveness to new and different ideas is refreshing."

Cooperative Education Supervisor's and Employer's Comment: "This student is making good progress at this time. Should move on to a new role within the center next semester. She is a very good worker and exceptionally mature."

Diane Musgrave, Coordinator, Foreign Language

"One of my students, Jim Jensen, works for Sears. He reported that his supervisor had proudly shown his end of term report to others and that, as a result of his work in Cooperative Education, he was taking a temporary leave of absence from school in order to pursue a special employee training program."

Ed Rategan, Coordinator, Business

"Marilyn Darrow's report on her company's growth is being duplicated for distribution to all employees in the company, so impressed was corporate management."

COMMENTS (Continued)

Letter to Mr. Ben Kilpack, Coordinator of Public Service Career students at Cañada College, from Robert Warner, Principal, North Plains Elementary School in North Plains, Oregon, where ten cooperative education students along with their coordinator spend their summer each year working with children of migrant workers. The co-op students assist with day care centers, summer elementary school, and other services in support of migrant families.

"It has been our privilege, this past summer, to learn to know and work with students from Cañada College. It would be difficult for me to relate the many services your students performed in behalf of our summer school. The enthusiasm of your students, as demonstrated by their love for our underprivileged children and willingness to give of themselves endlessly, was a constant example for our entire staff.

"It seemed remarkable to me that such a small college could produce such dedicated, sincere young people willing to give of themselves and yet be as sensitive as they were to our complex community and staff problems.

"Such a successful program was undoubtedly provided by endless hours of college staff planning and selections.

"I hope you will feel as I do that this summer venture was rewarding to your students and worthy of the many hours of your school's preparation and involvement.

"We hope you will want to continue and expand for next year. I have already talked to the right people in our State Department, and they are anxious to meet with you for next year's plans."

Comments from Student Reports

"The practical experience of being out of the classroom and into the 'real-life situation' is the most valuable part of the co-op program. Being right in the situation, not in a textbook gives the student a chance to question and have answered those things that are not in the power of the classroom teacher to give. My own rewards, in the good times and the bad times encountered, are all very positive."

"The cooperative education program has been of greater value to me than any project, educational program, or any type of classes that I have taken part in. This program has helped me by giving me the opportunity to tie my other courses into my actual job. I found that in planning and carrying out my objectives that I had to put into use a lot of the techniques that I was learning. As far as I am concerned this cooperative education has to be the greatest thing since Reading, 'Riting, and 'Rithmetic. I'd like to thank whoever it was that initiated it into our educational system as well as all of the people who help to carry it out. THANKS."

PROGRESS INDICATOR 17

OUTSIDE EVALUATION TEAM

Education Consultants of Palo Alto was designated as the independent agency to conduct the outside annual and final evaluations of the Community College Vocational Cooperative Education project.

Evaluation team members were:

Dr. A. Daniel Peck, Chairman of Evaluation Team; President of Education Consultants, specialist in educational development and program evaluations, Professor of Education and Director, Educational Technology Center, California State University, San Francisco.

Dr. L. O. Brockmann, Professor Emeritus, California State University, Fullerton; nationally-recognized expert on cooperative education. His experience in co-op extends from 1930 to the present. He is the author of the follow-up study of cooperative education from his original secondary school program development in Lewistown, Montana, beginning in 1930, with follow-up study published in 1971. He is also the evaluator of the California Cooperative Education Workshop at Disneyland Hotel, February, 1972.

Dr. Donald E. Tosti, vice president of Individualized Learning Systems, San Rafael, whose experience includes the development and operation of two Job Corps Centers, research and development in learning with Westinghouse Learning Corporation, teaching and research in higher education.

Dr. George Champion, Professor of Arts and Industries at California State University, San Francisco; former Director of Technological Education Center at California State University, San Francisco, and a recognized authority on cooperative education, including articulation between high school and college.

Mr. Ronald A. Grant, vocational instructor at College of Alameda and Oakland Skill Center, has had extensive experience working with minority vocational education and is currently under contract to produce a handbook for coordinators of cooperative education.

The team was accompanied by Mr. R. E. Hernandez, specialist in occupational education, California Community Colleges, who contributed much to the discussion and provided much background information for the team.

OTHER EVALUATION TEAM MEMBERS, 1971 and 1972

Dr. J. Clark Davis, Director, Research and Educational Planning Center, College of Education, University of Nevada, Reno. Program Director and Specialist in Vocational Education Research and Development.

Mr. Freeman Elzey, Specialist in innovative program development, San Francisco State College. Consultant in evaluation procedures including programs relating to elementary and secondary school instruction, guidance activities, and programmed instruction.

Mr. Charles Mobley, Senior Marketing Consultant for Individual Learning Systems; specialist in program evaluation for disadvantaged students, programmed learning systems development, and cooperative interaction with business, industry and community colleges.

Dr. Leonard Trout, Professor, Research and Educational Planning Center, College of Education, University of Nevada, Reno. Specialist in Vocational Education, Research, and Development.

Miss Barbara Washburn, Specialist in program development with U. S. Office of Economic Opportunity, Washington D.C. Consultant in educational program development and student personnel interviewing for program evaluation.

EVALUATION PROCEDURE

Educational Consultants contracted to provide for a completely autonomous outside evaluation of the Community College Vocational Education project as required for HEW Part D innovation projects. Members of the evaluation team were chosen for their particular expertise and consisted of experts in educational program development, vocational education, and cooperative education. Individual specialties included significant backgrounds in evaluation; a specialist in learning and psychology with extensive Job Corps and other vocational education experience; a specialist in technological education and cooperative education who previously directed an exemplary project in secondary school cooperative education; and a vocational instructor specialist in minority programs. Prior to each evaluation, Educational Consultants' staff worked with the consortium to develop a variety of data. Records of student evaluations, coordinator/instructor evaluations, as well as numerical data were requested

from each of the colleges. Their cooperation was excellent. For the Final Report the chairman was guided by responses from the 1971 and 1972 reports, and by other evidence of progress generated during the interim from April 1972. Continuing conversations were held with members of the consortium administration during the years of the project which provided guidance and new information of importance.

In March 1973, each of the colleges was asked to respond to a list of suggested data which reflected the most important developments the project developed over the three-year period. Since this is the comprehensive Final Report for the consortium project, the information requested reflects the increased sophistication in cooperative education of the participating institutions. Responses to sixteen (16) specific items determined to be of greatest significance are included.

As part of the evaluation a questionnaire was mailed to 356 randomly selected employers who were cooperating with the colleges. 146 responses were received, a 41% return.

During the site visits other valuable data was collected, including samples of brochures, forms, reports, and comments from various levels of program participation. Students, instructors, coordinators, administrators and employers were all encouraged to contribute comments. During the site visits, special efforts were made to interview representatives of each of these categories separately and again in groups.

Media presentations which were representative of articulation efforts in career education were made by each of the colleges to demonstrate the kinds of activities and materials that had been developed. These consisted of film, sound-slide presentations, newsletters, and printed handouts. In each college at least one team member inspected record-keeping and communication procedures for cooperative education work experience. The outside evaluation report is a synthesis of the individual reports from each of the team members and of a post site visit conference of the Educational Consultants team.

PROGRESS INDICATOR 18

EMPLOYERS REACTIONS TO COOPERATIVE EDUCATION: EVALUATION TEAM REPORT

It is evident that a significant part of cooperative education must be carried by the employer. Evaluation information about employer reactions and attitudes has been developed in two ways, first from interviewing a limited number of those involved, and then by mailed opinion survey. The employers interviewed were, in all probability, a group with positive attitudes and self-selected, in that they volunteered time for the interviews. Since this would appear to be a biased sample, additional data was gained through an opinion poll which was sent to a randomly-selected group of employers in both northern and southern geographic areas. The questions asked were directed either to the head of the company or to a person in direct contact with co-op students. Within the limited time period, 41% were returned. The written results are as strongly supportive as interviews have been on previous occasions. They do, however, point to a few who have disagreements with the cooperative program.

The response statements were all made in a positive sense so that the r esponder could indicate a degree of agreement or disagreement, including an indifferent category (so-so). A summary chart is provided on page 54.

Apparently most employers agree (1) that "many reports show community colleges increasingly serve as manpower labor pools of young, capable talent". This is not surprising since the trend of job development in cooperative education also shows that employers are turning to college placement centers and co-op education programs for new employees. Working relationships are becoming a greater part of the employer-college relationship.

Supervision of students (2) by the college is approved more often than not. However, enough employers are either in disagreement with the statement that they are effectively supervised by college personnel, or are indifferent to it, that this should be a matter of concern for the coordinators. Most agree (3) that classes taken at the college bear an effective degree of relevance. There is a significant group, however, who indicate either indifference or disagreement. Lack of information may be a factor in the level of indifference, but it is not unreasonable to expect some disagreement which points out that actual non-relevance does exist. The large majority (4) agreed that there is a potential for cooperative education employees in their firm. Among those who disagreed can be counted a number of small businesses which simply do not have room for expansion or additional employees. One replied in a note that his was a small family hardware store and that they could not provide more than one job opportunity and that only for a temporary co-op student. Two replies cited the reason for lack of potential in their firm as the fact that the union was closed, unsympathetic, and would not permit more students to enter their ranks.

Cooperative Education students apparently interact favorably with other employees (5). There was only one disagreement on this issue which was identified as a definite personality conflict by the respondent. Obviously on the whole, co-op students are well-accepted.

Only two firms (6) replied that they did not expect to continue with cooperative education. Both were small and had a low degree of flexibility. In general the prognosis is good for continued growth interaction between the employers and the colleges.

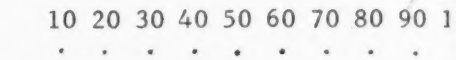
Many employers agreed that cooperative education should be further developed (7). The amount of disagreement is not especially significant and might be expected given the vagaries of human nature. Comments which were included with the return of the questionnaires were without exception positive and enthusiastic.

Supervision (8) of cooperative education students by company personnel was accepted highly as "comfortable and effective". While this statement is not well-phrased, it is assumed that the agreement is a positive acceptance of the concept and fact of supervision of a somewhat special nature on the part of the company.

The effect of motivating other employees by the example of cooperative education students (9) received the highest proportional disagreement response. 53% agree, 27% so-so, 20% disagree. This might be explained by the fact that many students were placed in jobs where most, if not all, other personnel were at an educational or professional level that made it in reality a meaningless statement. There are, however, so many instances in which more mature students in interviews have indicated that they were motivated by interactions with cooperative education students to continue or begin education beyond secondary school, that we should probably be more encouraged by the "strongly agree" and "agree" category responses than by the others.

In general, the questionnaires returned strongly support the cooperative education program. Each of the nine areas which were sampled provides specific information that the project is effective. Other areas where indifference or disagreement occurs tend to point up concerns of which the project directors were not unaware and for which remedial actions have in some instances already been initiated.

EMPLOYERS PROGRAM RATING SHEET (n=146)



1. Many reports indicate that community colleges are increasingly serving as manpower labor pools of young, capable talent.	41	Strongly Agree
	83	Agree
	16	So-so
	6	Disagree
	0	Strongly Disagree
2. Students are being supervised in an effective manner by the college.	14	Strongly Agree
	54	Agree
	59	So-so
	18	Disagree
	4	Strongly Disagree
3. Classes taken at the college are effective in the employee's training.	21	Strongly Agree
	77	Agree
	35	So-so
	13	Disagree
	0	Strongly Disagree
4. There is a potential for promotion and career development for cooperative education employees in your firm.	41	Strongly Agree
	73	Agree
	19	So-so
	6	Disagree
	4	Strongly Disagree
5. Cooperative Education students are interacting favorably with your regular employees.	48	Strongly Agree
	77	Agree
	15	So-so
	0	Disagree
	1	Strongly Disagree
6. Your firm expects to continue with the Cooperative Education program.	50	Strongly Agree
	85	Agree
	5	So-so
	0	Disagree
	2	Strongly Disagree
7. Cooperative Education should be developed further in your company.	31	Strongly Agree
	81	Agree
	21	So-so
	6	Disagree
	2	Strongly Disagree
8. Supervision of Cooperative Education students by your employees is comfortable and effective.	31	Strongly Agree
	91	Agree
	18	So-so
	4	Disagree
	2	Strongly Disagree
9. Present employees are motivated to enroll in college courses for further upgrading and retraining by their interaction with Cooperative Education students.	23	Strongly Agree
	51	Agree
	38	So-so
	23	Disagree
	4	Strongly Disagree

PROGRESS INDICATOR 19.

BROCHURES, COOPERATIVE EDUCATION

Put it All together with Cooperative Education

Cañada College

Mr. Ted Gilman, Assistant Dean

WHAT IS COOP ED?

Cañada College's Cooperative Education (Coop Ed) Plan answers the desire of college students to obtain practical job experience and to make a successful transition between school and work.

The long range aim of Cooperative Education is to provide current community and business work experience that give meaning and direction to the student's total educational experiences.

Career related on-the-job work experience strengthens the educational process through practical application of classroom theory. The inter-relating of work and study increases student motivation. As students see connections between the jobs they hold and the things they are learning on campus, greater interest in academic work develops.

All approved Cooperative Education work assignments are a regular part of the Cañada College educational program.

Cañada College

4200 Farm Hill Boulevard
Redwood City, Calif. 94061

Cooperative Education
Phone: (415) 364-1212, ext. 308

HOW IT WORKS

Students in the Coop Ed plan may earn one to four units of Coop credit in a semester. Credit is based on one unit for each five hours of work per week with a maximum of four units that can be earned per semester. A student may earn four units of Coop Ed credit for every 12 units completed from the general college course offerings.

Except in the case of the Alternate Semester Plan, students earning Coop Ed credit are required to be enrolled in no less than eight units including Coop Ed.

The possible variations of participating in the Coop Ed Plan are:

Parallel Plan: Students hold part-time, afternoon and evening, or swing shift jobs with appropriate college class loads.

Evening College New Careers: Special arrangements are made for studies related to full-time employment and new career goals.

Alternate Semester: Two students hold one full-time work station on a year-round basis. During each semester, one student is in school while the other works full time. This plan usually requires at least an extra semester to complete A.A. degree requirements.

COOP ED BENEFITS

Gaining knowledge by doing
Learning good work habits and attitudes while in career preparation
Receiving on-the-job counsel and guidance
Having a chance to stay in college when in financial need

DEGREE PROGRAMS

Coop Ed units satisfy a portion of the requirements for the A.A. degree and are transferable to most of the state colleges.

COOP ED PROGRAMS AT CAÑADA

Programs at Cañada College which tie in with the Coop Ed Plan include:

Administration of Justice (Police & Corrections)
Business Administration
Business Management
Clerk-Typist
Commercial Art
Credit & Finance Management
Environmental Technology
Food Technology & Management
General Clerical
Home Economics
Home Furnishing Merchandising
Industrial Management
Mental Health Assistant
Merchandising Management
Nursery School Assistant
Public Administration Management
Recreation Education
Research & Development Assistant
Secretarial
Small Business Management
Social Service Community Worker
Special Education
Supermarket Management
Teacher Assistant
X-Ray Technology

CAREER-JOB PLACEMENT

Coop Ed at Cañada College offers students the opportunity through joint classroom and on-the-job training to better prepare for careers in all phases of business and community occupations.

When the Coop Ed program is completed, students have available to them a job placement office on campus to help place them in appropriate jobs.

COOP ED INFORMATION

For additional information, contact your college counselor or the college Coop Ed Office in the administration building, 364-1212, ext. 308.

Cooperative Education Job Placement Program

SKYLINE COLLEGE
3300 College Drive
San Bruno, CA 94066

Mr. Floyd Elkins, Assistant Dean

WHAT IS COOPERATIVE EDUCATION?

Cooperative Education recognizes the value of work experience to a student's academic endeavors and provides insight into many careers. Each year over one thousand Skyline students earn academic credit for their part or full time jobs through this program. Using their jobs as learning situations, the students join with their employers and the college in establishing learning objectives to be accomplished during the semester.

ADVANTAGES OF COOPERATIVE EDUCATION

The student gains in many ways from the Cooperative Education program.

1. Getting a permanent job after graduation will be easier for a student who can offer work experience in addition to college training to prospective employers. A Cooperative Education student will gain immediate recognition from the thousands of employers in this area participating in the program.
2. Accomplishing learning objectives on a job requires that a student **really** gain worthwhile experiences on the job. Special recognition and promotion are often by-products of working more closely with employers.
3. Students are given the time and incentive to explore vocational opportunities. This gives them more information for selecting a career goal and related college instruction.
4. During the Cooperative Education experience students receive special guidance in private conferences with their college coordinators and special attention from their employers.
5. Many working students find this is the only way a full college unit load can be maintained. This makes graduating a more readily realizable goal.

HOW MANY UNITS CAN YOU EARN?

Cooperative Education is a regular college course applicable to the Associate of Arts degree. One academic unit is granted for every 75 hours worked per semester. Students who are employed in work related to their major at school or their career goal may receive a maximum of 4 units per semester. A total of 16 units may be earned in the two year A.A. degree program. General work experience students who are employed in positions unrelated to their studies may receive a maximum of 3 units per semester but a total of only 6 Cooperative Education units towards their A.A. degree.

General work experience students must attend a Related Instruction Class one hour weekly. This is required to aid students in gaining career information, determining their own interests and aptitudes, and learning about job rights, interview techniques and other useful information.

HOW DO YOU REGISTER FOR COOPERATIVE EDUCATION?

Day students may register for Cooperative Education on regular school registration days. A table is set up on the registration line where class cards are picked up. Counselors will not add Cooperative Education to a student's schedule prior to this time because of the need to fill out a special application form and to be screened for eligibility.

Evening students may register from 6:00 p.m. to 9:30 p.m. during the first week of classes at the Cooperative Education Office in Building 1, Room 319. Because of the need for pre-screening, Evening College students may not register for this course through the mail as they do for other courses.

DO YOU NEED A JOB TO ENROLL IN COOPERATIVE EDUCATION?

Yes! BUT if you do not have a job, the Job Placement Office is committed to providing ample opportunities for you to get a job which is suitable for Cooperative Education units.

Any job in which the student is regularly supervised and which offers a learning experience conducive to the establishment of learning objectives is suitable.

JOB PLACEMENT

HOW DOES THE JOB PLACEMENT SERVICE WORK FOR YOU?

Over 3,000 new job openings are listed with the Skyline College Job Placement Office each school year. The Job Placement Office has a variety of jobs available, both part and full time in such fields as retailing, transportation, banking, insurance, food service and recreation leadership. Positions include sales, management training, secretarial, general clerical, warehousing, inventory control, professional assisting, and customer service.

WHO CAN GET IN THE PROGRAM?

DAY and EVENING students are eligible. There are three plans:

Parallel Plan:	Regularly enrolled day students work after school on a part or full time basis.
Extended Day:	Evening College students hold regular day-time jobs while taking an appropriate class load in Evening College.
Alternate Semester:	Students work full time one semester without concurrently enrolling in other course work, provided that they have already earned an appropriate number of units and plan to return to regular class work in the following semester.

There are three unit rules governing eligibility for enrollment:

1. To enter the program for the first time, a student must have earned or be in the process of earning at least 12 units of other course work.
2. Every semester that a student enrolls for Cooperative Education, the student must enroll for a total of 8 units or more of course work, **including** Cooperative Education (except on Alternate Semester Plan – see above).
3. The student must maintain a ratio of 3 units of other course work (already earned or currently enrolled for) for every unit of Cooperative Education attempted.

WHO IS ELIGIBLE TO USE THE JOB PLACEMENT SERVICE?

All day and evening students currently enrolled at Skyline College may use this service whether or not they are enrolled in Cooperative Education. Graduates of Skyline as well as high school seniors who have committed themselves to coming to Skyline College are also welcome. Openings include part and full time, temporary and permanent employment. Students seeking employment should come to the Job Placement Office in Building 1, Room 223.

WHAT SPECIAL SERVICES DOES JOB PLACEMENT OFFER?

Students who are interested in secretarial positions that require a stated speed for typing and/or shorthand may be tested by a faculty member on the Skyline College Business Division staff. The results of the tests are then sent to the employers via the students when they go to their interviews.

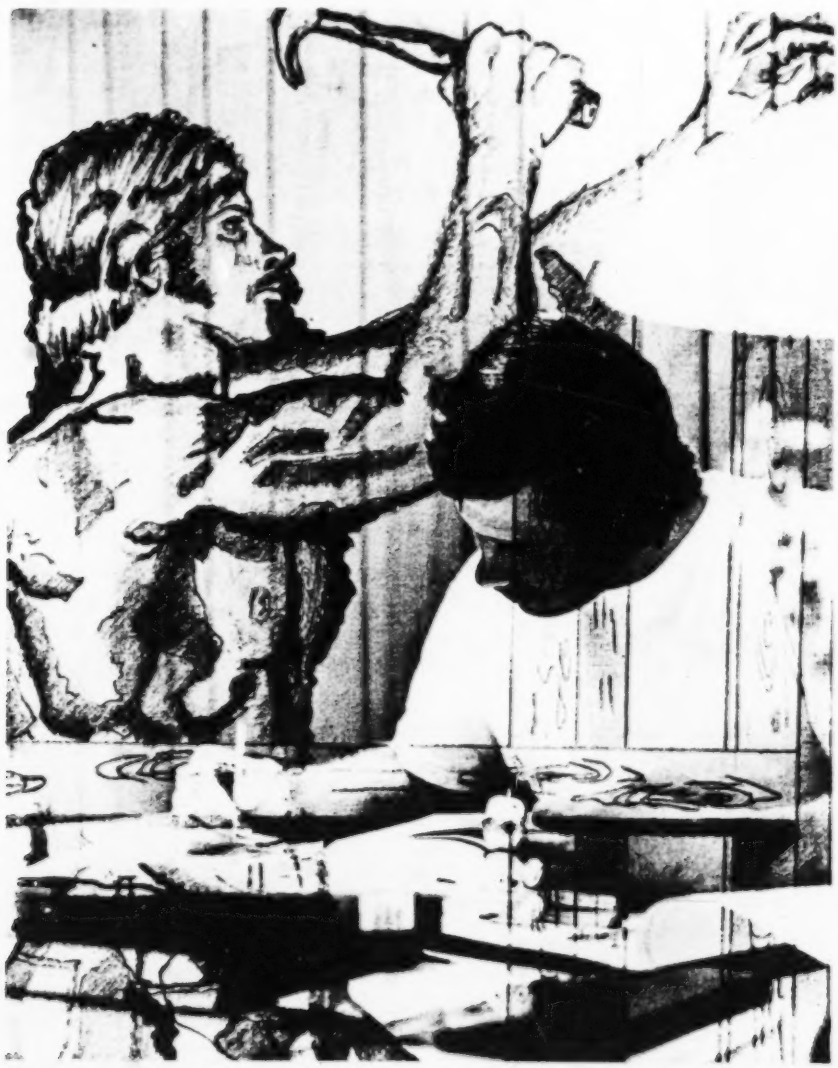
A credentialed counselor is available to give students career guidance or help them with special problems. Through arrangement with your counselor, interest and aptitude tests may be taken by students who have not yet made career choices.

For further information write or call:

Cooperative Education Office: 355-7000, Ext. 238
Job Placement Office: 355-7000, Ext. 236

PROGRESS INDICATOR 20.

NEWSLETTER SEGMENTS: ORANGE COAST COLLEGE



Cooperative Education . . . A better person through the double exposure of related work and education.

FOR THE RECORD

COOPERATIVE WORK EXPERIENCE NEWSLETTER

ORANGE COAST COLLEGE

VOLUME I – NUMBER 4
JUNE 1973

Mr. James Garmon, Program Director

Dr. Robert B. Moore
President, Orange Coast College

It's Not The Title That Counts — *IT'S THE RESULTS*

Sometimes we get caught up in our own jargon. The program herein described and discussed has had – still has – a lot of names and these different names for the same process lead to unnecessary confusion.

Irrespective of name the accomplishment is most understandable. It puts the student's interest in developing his job skills into the arena of productive and remunerative labor – it puts him to work!

From the articles in this publication you will note that the program assembles a host of counseling and overseeing instructor/coordinators to aid the process, for, not only does the program place the student in the arena and provide him with financial gain, it also assures students so placed that constructive supervision from both the employer and the college staff will be a part of the procedure. As a part of this, a student successfully completing the program also receives units of college credit.

If your college, business or industry is not presently involved in the program, I trust you will not hesitate to contact Orange Coast College and allow a representative to come and explain our "Cooperative Work Experience Education" program to you. It certainly has my highest recommendation.

TOOT - TOOT!!

As with the quality of any one vocational program, there are those inherent things that add to the quality of its excellence. We are talking of the Salgo-Noren Award – an award granted to a college or university based solely on the quality of instruction. For the second straight year Orange Coast College was one of the 50 recipients nationally for this prestigious academic recognition.

We are tooting because 80 of our instructor/coordinators are among the faculty who have made O.C.C. a dynamic model for both academic and vocational programs. Orange Coast College shares the honors this year with such schools as Purdue, Marquette, University of Maine and Stanford (Stanford being the only other California school to receive the award this year).

Hopefully this award will underscore the fact that an institution can exist for academic and vocational programs and in doing so maintain a quality of excellence in both areas! Toot!

FOR THE RECORD

The Cooperative Education team at OCC placed 368 students in new work experience stations through mid-April. This more than doubled the placement of last year.

The following job opening appeared in a job listing by the Job Development Office. It was provided by Dean Westgaard who is a coordinator for physical education/recreation area:

JOB: Wing Walker
MAJOR: Physical Education/Recreation
PAY & HOURS: To be arranged
DESCRIPTION: Perform aerobatic stunts on wing of airplane.
REQUIREMENTS: No taller than 5'2" and weigh no more than 120 lbs.
CAUTION: This job could be hazardous to your health!

Needless to say, our "Dino" can't be accused of not hustling new and exciting opportunities for OCC students.

James Garmon and Clyde Reyes touched base with representatives and students of local high schools which show a combined enrollment of more than 91,000 pupils within the boundaries of the Coast Community College District. Not bad considering Garmon and Reyes were lost half the time trying to locate the schools!

Talks are under way by representatives of the OCC Cooperative Education Office, officials of Newport-Mesa High School District and members of the Huntington Beach Unified High School District to team events and district wide programs that would mutually benefit all students simultaneously. Thanks to the cooperation of everyone, these ventures are becoming more of a reality everyday.

No! Jim Garmon is not Clyde Reyes' father!!

Total student enrollment in the Co-op program in the Coast Community College District is pushing 2,700!

Fifty-seven students were placed on new job stations through the efforts of coordinators Glenda Riddick, Gene Overholt, Larry Wood, Larry Carlson and Bill Ackerman. Thanks, team!

Judy Tallman Secretary, Office of Cooperative Work Experience Education

PHIL CUTLER: PROFILE OF AN EVENING COLLEGE COORDINATOR

Phil Cutler Evening College Coordinator

As a coordinator of students attending evening college electronics programs, Phillip Cutler is a most unusual and unique individual. He is also a consultant, lecturer, and owner of Education Research Associates. Phil is a veteran of 16 years teaching in Orange Coast's Evening College and has been teaching in one form or another most of his adult life. A coordinator of Cooperative Education students for the past three years, Phil admits that he teaches and is involved with Cooperative Education out of a desire to improve the quality of technical people in the field of electronics. "Too often" Phil says, "technicians perform mundane tasks on their jobs without real understanding of the theory behind their technical work." He believes that the Cooperative Education program is helping to change that. Phil contributes to students technical awareness and currency by arranging and coordinating a series of technical seminars each semester, dealing with state-of-the-art electronics technology.

JUDY, JUDY ON DUTY!

As we understand it, when Judy Tallman accepted the position as Secretary to James Garmon three years ago it was because it offered a bigger job challenge, more pay and a healthy new environment. What more could a young gal ask for?

Of course, it was recognized that Judy might have to sacrifice a few things initially in accepting such a desirable job – like a typewriter, desk, telephone and other assundry frills. Anyway, the office floor was as good of place as any to organize the resulting paperwork of the initial enrollment of some 700 students. So it was . . . Judy, Judy, on duty and thank god!

Judy Tallman is comparable to the extinct "Superwoman" for what she has done is a feat in itself! Now, it is something to be organized and grow accordingly into a developed system of operation – even if it meant picking up various pieces of established procedures. But, to take on a job that had no system – nor pieces and build a supporting role for a director who must be able to account almost daily for 1,500 students & 80 instructor/coordinators and remain sane is a feat!

Checking-rechecking, adds-drops, sad stories-happy endings, gripes-groans & moans, do this – I need that, how do you spell this or that, edit-draft & type, must be submitted yesterday, coordinator time cards, student time cards, **#%@, catch the phone – wrong number, catch the line – obscene phone call, and when you get through with that . . . No wonder our little Judy has become a master at simplification. "With our initial enrollment of over 700 students" says Judy, "it became necessary to examine ways of simplifying all existing paper work and coordinating contacts between our office, the students and our instructors. This took a great deal of effort to establish a workable system, refinements and further simplification as new loopholes developed. I couldn't have done it without the help of the district data system staff."

Working closely with Jim Garmon, Judy has assisted in designing an almost fool-proof system of registration. This has been an area of great experiment and trial and finally tribulation. The registration process screens out unqualified students, matches the student to his respective coordinator, automatically balances coordinator load, differentiates between day and evening enrollment, sets instructor/student meeting dates, in addition to processing applicable credit hours into the student's current class schedule. This is amazing in that Judy's desk contains a post registration checkpoint system that allows the system to run smoothly and efficiently with instantaneous accountability!

"Across the hall I have another responsibility," sighs Judy, "and that is our Job Development Office." This has been another boom to articulate. The placement of students into work experience job stations rose from a total of 76 last year, to well over 350 as of April for this year. This means we create a pool of students each semester who will be eligible for work experience at the start of the new registration period. This means we have more cards, forms and much personal contact that insures they are reminded of their eligibility prior to the new semester. "This is handled by Clyde Reyes, our Job Development Coordinator who also has a phone, files, student assistants, seminars and the whole bit – I am only sane Monday through Friday noon – but I don't think I'd trade it for anything less exciting!"

"All in all I can look back on three of the most interesting and exciting years of my past job history. I really feel a sense of pride and personal accomplishment when I know other schools across the nation and throughout the state point to Orange Coast College as the example. I have rather enjoyed having a tiger by the tail, it's exhilirating!"

Thank you, Jude . . . now will you take a letter?

The Consortium In Retrospect

Vaughn Redding, Director Cooperative Work Experience Education, Coast Community College District

In retrospect, much has taken place during the past three years of the Cooperative Education consortium between the Coast Community College District and the San Mateo College District.

Students, instructors and administrators have presented evidence that the project was tremendously worthwhile. The most gratifying and exciting experiences have been the student acceptance and involvement. The first year's target was to involve 1,000 students on all five campuses. Over 2,000 students enrolled that first year. The second year goal was 2,000 students and over 4,000 students registered. The third year planned for 3,000 students and resulted in nearly 6,000. Numbers are not important except to indicate acceptance of the program by students. Of greater importance is to look at what students gained. How did their experiences relate to their general education? Did their Cooperative Education experiences motivate them to higher goals? Did those completing community college work obtain higher level jobs and wages over those who lacked experience? The research now in progress will determine effectiveness of the program as to the above factors.

Looking back three years when the Coast Community College District was asked to become involved in the Cooperative Education consortium with San Mateo Junior College District, it is pleasant to remember that when faced with some faculty resistance and questions regarding the value and merit of such a program in a community college, the past three years have served as a solid test in the overall evaluation of the program. College directors for the Coast Community College District, James Garmon of Orange Coast and Karl Strandberg of Golden West, are commended for their administrative guidance that has seen the seeds of the consortium grow into a program of enthusiasm and opportunity. Annual reports from their instructor/coordinators tell the story of their enthusiasm for the educational possibilities of such a program.

One requirement for the consortium administration was to share their experiences with other community colleges in California and nation wide, who were developing programs. In the spring of 1972 the Coast Community College District Cooperative Education administrators from Orange Coast and Golden West Colleges developed a three day workshop held at the Disneyland Hotel attended by representatives from more than 70 colleges, representatives from industry, the Community College state office in Sacramento and four year colleges. Films, brochures, reports and other materials have been developed and shared with other colleges, who in turn have made us aware of their growing programs and new and innovative ideas in this program.

Another important part of the three year consortium are the relationships developed between Jim Garmon of Orange Coast College and his staff, Karl Strandberg of Golden West College and his staff, with the program administrators from the San Mateo District. The discussions between faculty and staff with the three campuses in the North and the two campuses in the South have raised the level of acceptance of suggestions and innovations developed on other campuses and in turn have resulted in mutual assistance in solving common problems. This relationship will continue to benefit students as the program is improved and as student demands become evident.

Dr. Robert L. Bennett of the San Mateo Junior College District wrote the proposal with the assistance of Dr. Bernard J. Luskin of our district and has been instrumental in planning and implementing the development of all aspects of the program. Looking ahead, the on-going success of this model program will continue to be determined by its merit as evaluated by students and faculty on the five campuses, and by their

WORK EXPERIENCE AND EVENING COLLEGE

Dr. Charles Lipof Dean of Evening College

The advent of the Work Experience Program, as an integral part of the college's educational experience, was indeed a step in the right direction – in particular for the Evening College student. For years those individuals who could not afford to attend college on a full-time basis had been learning on the job, but had not had this very valuable experience recognized for college credit. Of a total of 1,450 students enrolled in the Spring '73 semester Work Experience program, 833 or 60% were Evening College students. At long last their on-going classroom work was to be tied in more closely with a supervised, planned, work experience. The popularity of the program is one of the best measures of success.

While some educational institutions long held themselves aloof from the world of work, many are now investigating work experience under many titles and names. We should be justifiably proud that we took an early part in the program development.

The program has had a number of ancillary benefits. Just to name two, the contacts made by the supervisors as they visit the work stations and discuss the program with employers and foremen has undoubtedly broadened the scope of understanding of the College in the community. A second result has been increased feedback to the College in the form of ideas for new courses and programs, and changes to existing programs. It has been one more line of communication that the College can use to keep in tune with the reality of what is actually going on in that vital sector of the community . . . the world of work.